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ORIGINAL ARTICLES.

THE NATURE OF INFLAMMATION.*

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THERE is no abnormal condition of the human system or of its various parts which calls for the physician's or surgeon's aid so frequently as the condition universally designated inflammation. Every organ, every tissue, from center to circumference inclusive, inside or outside, this process is liable to invade with grades of danger ranging from slightly noticed inconvenience and discomfort to immediately threatening death. How to meet and successfully avert the ultimate or unrestrained disastrous, or fatal consequences of this inflammatory process has been for ages past, and will be for ages to come, the greatest *desideratum* of medical art. What is inflammation? I can quote you many attempted definitions from both ancient and modern authors, but none of us are satisfied with any definition yet formulated. The problem is a difficult one, while increased observation and experiment as yet only push the conclusion we seek into deeper obscurity. Until recent times it was thought the question was sufficiently answered by a description of the more manifest symptoms, and a notation of some of the more apparent causes or agencies in producing or inducing inflammatory action. Again, it has been queried whether inflammation is a disease of the nervous or sanguineous system, and if of the blood, whether it is a general diseased condition, affecting at the same time every atom of the whole body; or only a local condition, say of the eye, and not as to the toes, the fingers, lungs, the brain, and not the stomach. Or, again, if it is a disease of the nervous system, must it of necessity involve the sum total of the nervous system or only a part, and a part also not be affected? We need not at this time pretend to enumerate all the theories that have been or are now entertained. But this much I assert with emphasis, that the practice of any teacher or writer will guide him largely to formulate a theory to prove his practice correct. How true this is in regard to the phlogistic theory and the anti-phlogistic treatment you can scarcely have failed to observe. Others, observing the deranged and diminished action of the secretory system, direct their whole line of treatment to increase the secretions, and obtaining some satisfactory result from that treatment, are ready to assert and maintain that the origin and essence of the disease is chargeable to diminished action of the secretory system, and thus show us quite a plaus-

ible philosophy. The same or similar conclusions are reached by those who direct their attention to the altered conditions of the emunctory system. I presume we should be prepared to witness the same conditions when a microbial origin of inflammation shall be asserted or assumed. And if it so shall be, and another bubble burst, to come and go, it will be neither the first, and probably not the last sad and disappointing experience.

Very early in the history of medical art four of the more commonly observed symptoms of inflammation were well known and described by Celsus, to wit: Redness, heat, pain and swelling. Not alone did that old veteran assume that in his short statement, but he gave a full and sufficient definition of the inflammatory process. It was standard for 1,500 years, and remained quite universally satisfactory for 250 years after the great discovery of Harvey, as perfected by Boerhaave and his co-laborers. From that period it became easy enough to formulate the phlogistic theory by embodying the four symptoms described so long before by Celsus. Before the discovery by Harvey of the double office of the heart, the oxygenation of the blood, and casting off the products or refuse of the internal human combustion, it does not seem possible that any reasonable theory for the inflammatory process could have been formulated—that is, reasonable to us, from our knowledge of anatomical and physiological facts. Inflammation for those hundreds of years must, however, have been just what it is today, and from the first advent of human beings on the earth. From the ripened fruit of Harvey's discovery there soon was hatched and formulated the phlogistic theory, and the anti-phlogistic treatment of inflammation. Understand me, I am not now speaking of inflammation from traumatism, nor from specific causes, as smallpox, erysipelas, measles, etc., but what has generally been represented or called idiopathic inflammation. Latterly the term "infective" is proposed in the place of idiopathic. I do not like the change, for the word infective will not express the general fact as well as idiopathic. It is too limited in its application, just as idiopathic is the contrary. I shall have occasion again to speak of this further on. I will now put the case this way: To-day an individual is in perfect health as far as known. You are called in to-morrow and find him with a pneumonia, phrenitis, nephritis, carditis, bronchitis, gastritis or other "itis." We may waive dispute as to the idiopathic and infective names, as also for the present the causes, either probable, possible or real, for that is not the conundrum proposed. What is inflammation? What is its nature? In what, of what, does it essentially consist? Can we discover the nest egg

* Read before the Luzerne County Medical Society.

or original factor among all the organs and parts, fluids and solids, or from or among all the various functions? Can we name the place from whence the symptoms arise and proceed? In law, frequently, the grand question is, who struck the first blow that in the *melee* terminated in the killing of a man? Not unlike it is the problem now proposed—what organ, what system, what function first balked or kicked, and thus deranged the whole machine and engendered the state we call inflammation? And again, was the cause from within or without? At a single glance you see it is a case of inflammation. The throbbing heart, the increased rapidity of the sanguineous flow, the rapid respiration, pain, etc., help to make your diagnosis—most certainly the present symptoms were not present at the beginning. By inquiry you learn what you would be pretty safe in assuming to know, that the present symptoms were preceded by a chill or rigor, a sense of coldness, not heat; a feeble pulse, a sense of general contraction, not expansion. The first noticeable symptom or changed action of the sanguineous system is of diminished and decreased action. The heart beat is feeble, the arteries reduced in size, the pulse beat known as small and wiry. The starting point, so far as we can observe, appears to be a shock to the nervous system, as manifested by the chill. The reaction from that is the unnatural and increased performance of the sanguineous system, acting in response to the command of nervous influence and excitement. The question forced upon us is this: Does the train of symptoms first inaugurated follow each other in the relation of cause and effect?

It is scarcely to be doubted that the primary or first symptom of the train to follow is observed as some offence to the nervous system. This is certainly the case as regards inflammation from direct injury or traumatism, nor is it much less certain as to what we call idiopathic inflammation. Nervous shock and pain from direct injury are too manifest, too often observed and experienced, to require more than mere mention. For sixty years the poor frog, rabbit and dog have been the subjects of endless experiment, for the purpose of throwing some light upon the process and nature of inflammation, to what insignificant beneficial results medical men as well as laymen can abundantly testify. A frog is not a man, nor is a man a rabbit. Should we attempt to mutilate a man as we do a frog, the man would probably manifest some qualities and symptoms which the frog does not.

The volumes written to describe, and the diagrams to illustrate, what takes place in the second and later stages of the inflammatory process never have, never will, and never can give us the knowledge which we so much desire as to the essential nature and the operations of the first factor in idiopathic inflammation. The greater of these herculean labors and wonderful experiments have been to show us the manner in which the blood substance departs from the congested capillaries. Blood substance, in health, is always passing out of the capillaries for the nourishment and the growth of all the tissues and organs. In inflam-

mation the only difference is that there is a superfluous amount thrown out, which, unappropriated by the process of natural requirement, becomes foreign matter and an offence to the regular and natural performance of healthy function. A blister applied to the cutaneous surface will cause the same material to pass through and out from the capillaries. The fact is everything, the modus is of inferior consequence. Discoveries subsequent to congestion and effusion are entirely too late to give us correct ideas of the nature of inflammation, or to indicate a theory from whence we may found a preventive or curative practice. If the natural, anatomical, physiological and psychological conditions of a man and the frog were more nearly alike the experiments would be of much more value.

But what do we observe in idiopathic inflammation? Lassitude, a sense of uneasiness and discomfort, more or less manifest, but the chill or rigor is the emphatic indication of the impending inflammation. In fact, it alone is pathognomonic, positive and unmistakably certain. In the more violent shocks to the nervous system, from whatever cause, the chill or rigor may be so severe and desperate as to paralyze the sanguineous system to that extent that reaction does not follow, and death ensues. In such a case it is termed death from shock, whether the cause is injury or traumatism, or idiopathic, as from exposure to cold. The ability of the sanguineous system in health to perform its work efficiently, or in disease to perform curative work, depends upon its supply of nervous energy. If, therefore, by a severance of the nervous system, or its paralysis from toxic cause or chill, the tonicity of the heart and arteries ceases, death is inevitable. Just as certain as that day follows night is chill followed by an increased activity in the blood circulation, by a sense of increased heat, a more rapid respiration, congestion of the capillaries, exudation of blood substance, with a tendency of the morbid action to some particular vital part or organ. Upon what rule Nature makes her selection of organ or region for exudation and possible necrosis, we do not know. Redness, pain, swelling and impaired function give us to understand the part she is selecting or dooming for necrosis. Possibly the effects of the first shock to the nervous system upon the secretory or emunctory systems have been too lightly estimated, for it is certain that from the period of chill the secretions are arrested, as also the emunctory function. These of themselves must rapidly produce dangerous, if not fatal, results if protracted.

Our remarks upon the necessity of constant nervous tonic supply of energy to the whole sanguineous system applies with equal force to the secretory and emunctory systems or functions. Both the latter must be taken into account in our estimate of the nature of the inflammatory process. The orderly and healthy performance of natural functions in man is partly governed by the laws of physics and chemistry, but not entirely so. Beyond the power of natural vision or our greatest multiple of the same by

microscopic aid, beyond our widest range of observation, experiment, or delicacy of test, we are impressed that there is still an unseen power, in constant and efficient operation, which the human mind has hitherto been unable to exactly appreciate, examine, explain or understand, and unable to formulate to a rule. It has been called vital power, vital principle, etc. It is this unknown quantity that knocks us on the head when we cannot understand how we lost our patient. Our nearest approach to an understanding of these unseen forces or powers is like the search for infinity. There will still remain, like the gauze curtain dividing life from death, a separation of scarcely tangible texture, penetrable to spirit only, impervious to physical sense, and yet we feel impressed by the magic power, conscious that *our* secret thoughts are known and judged by the mystic power so awfully near, just behind the screen. Impassable and charming barrier, precious contiguity! Here the best men of our profession and race have presented themselves by day and by night, sleeping or waking, waiting, watching, praying for one glimpse beyond the curtain, the abode of verity, the home of ultimate truth. Failing in this direction to discover the origin of first causes, we fall back upon our own finite and limited resources and forge the phrase "vital," only another word for the unknown and possibly unknowable.

The grosser forms of injury to the nervous system that are most common in lighting up the fires of inflammation we can easily appreciate and understand. But there are other causes or injuries less manifest to our senses and observation, and yet are most potent and powerful to produce the gravest and most formidable forms of inflammation; so very idiopathic, indeed, that they range above, beyond, outside and independent of the ordinary range of so-called idiopathic causes. And right here is where the frog theories cease to have for us any value. A physician need not to practice very many years to become convinced that undue emotions, peculiar to human beings, giving but feeble outward signs, may rack the frame from center to circumference, dethrone reason, defy all rules, disturb the very soul's repose, and produce the train of symptoms of inflammation, directing the course to the most vital parts, leaving the body partially intact, first robbing it of all that makes life valuable or existence tolerable. The nature of inflammation cannot be compassed and formulated definitely, except by investigation of its various causes, its phenomena or progressive course of development, its tendency, unobstructed by art and by modification produced by treatment. The sole object of our investigation into its nature is designed for its aim and end to direct us to the best course of treatment for its abatement and cure. The formulating of our theory is our first step in that direction. The proving of our theory is by obtaining satisfactory and successful results from the practice indicated by our theory. If another theory and another practice produces better results we are bound to distrust our theory—nay more, we should say cast aside

our theory and abandon our doubtful practice. Partisanship in medical theory or practice is a cruel and wicked taskmaster. In the presence of disease and impending death we ought to feel solemnly reminded of the obligations we owe to truth, and the greatest of all obligations, charity toward the opinion of others. Sink or swim, win or lose, God grant that we may enjoy the comfort and consolation of this heavenly grace. So, gentlemen, when I have, in relation to this subject, appeared an enthusiastic supporter or advocate of the anti-phlogistic treatment of inflammation, you must understand me as referring to what I call idiopathic inflammation, and by no means to what I call inflammation from specific causes. The early recognition of inflammation from specific causes, as smallpox, measles, erysipelas, and the blood poisoning products of traumatic and idiopathic inflammation, led to what received the name: "The Humoral Pathology." That is a branch of our general subject which I will not follow in this dissertation further than to say that inflammation, from such specific causes, is still essentially inflammation, in all its phenomena and consequences, as idiopathic inflammation, but that its proper treatment is as far from it as is the North Pole from the South Pole. Inflammation is not a disease *per se*; it is a natural process for the repair of injury, for the elimination of specific toxic matter that has reached the blood circulation, or it is the penalty and compensation Nature demands for an immediate preceding injury or affront to the nervous system. In a state of health there is an equilibrium or equipoise of all the vital functions. Injury to one disturbs all; is appreciated and resented by all. To acquire, repossess or regain the natural status is alike the business of Nature, and the object of the physician. As in law punishment may appear enormously in disproportion to the offence, so in the inflammatory process, once the fire is kindled, medical art will have performed full duty, if it can moderate and modify the superfluous and excessive natural impulses, preventing undue effusion and its train of disastrous consequences. Among doctors, as well as laymen, the most universally assigned cause for idiopathic inflammation is suddenly changed temperature, general or local, generally also from heat to cold, aggravated by moisture. Waiving the preliminary symptoms of sneezing, increased action of the lachrymal glands and the stoppage of the secretions, yawning, lassitude and general undefinable discomfort and uneasiness, the first unmistakable symptom of impending inflammation is the chill or rigor. That is the alarm gun for the coming struggle. The severity and duration of that chill or rigor conveys fair warning of the part the sanguineous system will take in the battle. The rigor or chill denotes the offense to the nervous system; it is the lightning's flash, but the heart and arteries will respond in crashing thunder. The former is the gathering of the waters, the latter is the roaring flood.

Any discussion of a microbial cause of idiopathic inflammation is yet premature. What

facts may yet be found or what theory based thereon, I do not know and cannot pretend to forecast. So far as treatment throws any light upon the nature of inflammation, it must depend upon the kind of treatment given. Here, unfortunately, we are by the ears. My argument would be based upon my treatment and your argument upon your treatment. As to the products of unchecked inflammation and the ultimate consequences of such products we ought not to disagree, nor in that estimate should we overlook the barricading of the watchful, faithful guardian cells—to protect the system from universal infection and contamination. There is a field in the plan of treatment, yet to be cultivated, relating to the stage of chill, or even before chill actually begins. After the chill we know full well what will come next. But before or during the chill cannot something be done to appease the nervous system, or allay its severity and duration, and if so might we not reasonably expect a modified or less rampant condition of the sanguineous system? Possibly some anæsthetic, either known or that may be discovered, that administered at that early stage might so act upon the nervous system as to abort the natural train of symptoms that always follow.

My theory and practice is grounded upon a direct attack upon the sanguinary system. Of course, the physician takes each case as he finds it; too often not until the chill has gone and the heart and arteries are going at high pressure. Even at this stage may not the nervous system be forced to withdraw the vigor of its impelling force to the circulatory system? I well know the importance, advantage and utility of early venesection. The period for its great utility is before effusion takes place, just as a pail of water will stop an incipient fire, which neglected for a few moments will defy a torrent of water. Neither phlebotomy nor any other medical treatment is of much promise after the stage of thickening of the serum, muco-purulence, ulceration, formation of pus and gangrene.

The disasters wrought by the inflammatory process, as observed during life, and as revealed by post-mortem examination, are referable entirely to undue or excessive natural work of the sanguineous system. Whether any course of treatment directed solely to the nervous system in inflammation subsequent to effusion will prevent the morbid changes that must occur from excessive vascular action may well be doubted at the present stage of medical knowledge. Whatever line of treatment is adopted to prevent dangerous or fatal results from the inflammatory process, should be directed to the prevention of deposit, of whatever abnormal character, by the blood. I often hear some of you remark, somewhat guardedly, that perhaps in well selected cases phlebotomy may be performed with advantage. Were this the result of practical demonstration it would be much more to the point. This admission, so far as it goes, is consonant with the anti-phlogistic theory; but is only grudgingly permissive. Those who would successfully teach, must *direct*, not permit. Once for all, I

must beg to suggest that, in this behalf, individual experience alone qualifies to speak with authority. This qualification only will properly fill the expectation of students of medical art.

There are cases enough where we can make daily visits and wait with patience and hope that something favorable will turn up, but an acute inflammation of a vital organ or part is not that kind of case. Fortunately, simple serous effusion may often become absorbed, taken up and removed by natural processes; *less often*, if it becomes muco-purulent, indurated or pus, and wisely so, for in the latter changed condition, unless the watchful cells shall have erected their barriers to prevent it, absorption develops an infective inflammation many times more dangerous than the original. Whether this last is more properly called hectic fever, or fever from infection, or secondary inflammation, or specific inflammation, matters little, so far as a name is concerned. Muco-purulent, or pus quantities, should be visited as soon as detected, *wheresoever located*, by lancet, bistoury, trocar, or needle and pump.

The word *inflammation*, from "*flamma*," is not well chosen to express the cause, nature or initial factor in that process. It sub-dates the beginning of the disturbance, and directs our attention to a single symptom of the secondary or consequential stage of the abnormal process, to wit, a sense of increased heat—largely a false impression, for the real increase of heat makes but feeble impression upon the thermometric scale. The term inflammation, however, has been so long and universally in use that it would be difficult to provide a new word to take its place. Perhaps this is a proper place to allude to another closely allied condition universally designated *fever*. The prominent pathognomic symptoms of these two abnormal conditions have such a resemblance, and are often so difficult to differentiate, that an idea of a common or similar origin is forcibly suggested, notwithstanding a thousand authors and teachers have given us to understand otherwise. The word *fever*, from fire, as well as *flamma*, designates and represents in either case the sense or feeling of increased heat, whether real, or only apparently or seemingly so. Neither of the terms relate to the primary origin of the symptoms, or give any idea as to the initial or starting point of the *flamma* or the fever. Even such terms, however, are not destitute of ability to constantly impress our *attention and curative efforts* in possibly a wrong direction. I earnestly ask you, gentlemen, to carefully and thoughtfully interrogate yourselves as well as medical writers as to this. Other words coined or selected at this late day I am aware would need the approval or fatherhood of a demigod. The word *hazel*, without the prefixed witch, is merely an indifferent bush, but witchhazel is magical for ever. Stand by the dicta of the fathers, though the heavens fall. That is just as appropriate, and just as inappropriate, in medical art as in law, philosophy or theology. Perfection in these branches of human knowledge seems apparently as far distant now as in the long ago. Our experience and observation teach us, if they teach us anything, that in all these mat-

ters there is a possibility that there may be a restatement of general principles along these lines. It were idle to deny that there has been improvement, but the final, the ultimate, has yet to be said and written. In the main, men are born and die the same as of yore. Those who do not die we claim to have saved by our art, but first or last all die, just as from the beginning. *Vis medicatrix naturæ*, we may personify as of comely countenance, of gentle mein, a most welcome and unseen visitor, whether men wake or sleep, still going about doing good, without heralds, unushered, unknown, unknowable, true inspirer of hope, of courage, of faith. Only another feature of the unknown quantity.

The nature of inflammation, like the nature of fever, we shall solve, if ever, at one and the same time. There is something prior to the *flamma*, something that antedates the *fever*. Both conditions begin with a sense of cold or chill, both are followed by the sense of increased heat. This, if far enough to trace the symptoms to show us that neither *flamma* nor fever indicate anything as to the nature or cause of the symptoms observed or experienced, we must admit that the secondary factors in either case are disturbances of both the nervous and sanguineous systems, and in the nature of cause and effect. That the train of symptoms originates in either case in some offence to the nervous system I think is palpably manifest. Of course, the nervous system depends upon a constant supply of healthy blood, and the heart and arteries depend also upon constant nervous supply of energy. These functions are mutually dependent one upon the other, and each sympathizes with the other. In inanimate Nature we are not ignorant of the violent disturbance that occurs to molecular attraction by sudden change of temperature from heat to cold, as instanced in the congealing of water, the fracture of glass and metals, the tempering of steel and iron. In both *flamma* and fever the treatment relates almost entirely to the prevention or controlling of the effects likely to be produced by an excessive action of the sanguineous system. The fatal results in either case are of the same nature and character. The primary symptoms and causes are of nearly allied character. Though we do not speak of specific causes for the term idiopathic inflammation, or of many fevers, yet why not? Have we not seen cases enough of inflammation from a heated condition to cold to make it quite certain that such sudden change is as certain to produce febrile or inflammatory action as is hot water or hot iron, or as contact with smallpox, measles, scabies or scarlatina, is to produce those disorders? Why then is cold air not specific in its action? The shock to the nervous system produced by fright, though only temporary, is responded to in an instant by the heart's increased action. Though this quickly subsides, the damage to the nervous system may prove lasting. What we do not observe in the frog, dog and rabbit, as the emotions in man of love, anger, fear, hatred, jealousy, mere shadows of reality, mere conjurings of the mind, as unreal as dreams, yet, unsubjected to

sober reason, and the commonest common sense, may lay the foundation for many a lingering fever, many a desperate inflammation. Whether the poor bull-frog catches cold by getting his feet wet, or is exasperated by emotions as are men, I do not know. Are the effects of these inward disturbances the prompters of the final and fatal changes found upon post-mortem examinations? I think so, like the beginning of inflammation from traumatic and other recognized causes, first manifest by the exciting effects upon the nervous system and depressing effects upon the sanguineous system, culminating in chill or rigor. I would gladly sum up my conclusions by a theory upon which I think treatment should be based, and it would not be on the lines that you or I have been instructed, but that is not my undertaking in this brief paper. That would not be an answer to the problem you have given me. I have had in mind simply to trace the phenomena of inflammation, as herein limited, to its origin. The light of my compass points to the nervous system, and if I have the bearings, it still leaves the *how* and the *why* unexplained. The secret mystery of the nervous system I cannot fathom; possibly you can. How it receives or imbibes its displeasure is a mystery. How it manifests its resentment we may discover in making our autopsies.

I present you this brief paper on a great and important subject. That it is a perfect statement of the nature of inflammation I dare not affirm. As to the criticisms you may bestow upon it, neither myself or you are competent to decide as to their justness, fallibility or infallibility. The apparent and real truth is, that even at this late day, the theories and the practice for the alleviation or cure of this particular class of disordered actions is in a decidedly chaotic condition. A hundred theories have been advocated and entertained, and at last cast aside as worthless. As to treatment, one extravagance has followed another; some cases have recovered, and the others have died. Every one thinks he has cured some; none will admit that they have damaged some and killed others. I admit that I once had much firmer convictions as to a theory, and also as to treatment, than I have now. However, I am still unsatisfied and unconvinced that the most modern treatment is productive of better or equally salutary results as under a rule of practice which I followed with all its imperfections. You, gentlemen, are now in the race, and must run the gauntlet, taking the assaults from right and left, from front and rear, and I can only hope that, as you emerge from the ordeal, you may be awarded a crown of everlasting victory.

Dr. Baldy, in considering the subject of *urethral caruncle*, (*Philadelphia Polyclinic*) called attention to the fact that this condition is rare. The lesion most often mistaken for urethral caruncle is a true hemorrhoidal condition of the lower floor of the urethra. When these hemorrhoids become annoying and painful, it will usually be found that the trouble is due to an irritable bladder. For successful relief, the local symptoms must not be allowed to overshadow the more important bladder trouble. Dilatation of the urethra is usually sufficient to effect a cure.

HEALTH RESORTS IN EUROPE AND NORTH AFRICA

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INTERMEDIATE CLIMATES. (CONTINUED).—

NAPLES, AMALFI, SORRENTO AND CAPRI.

SEE Naples and die! is an expression well-known to everybody who has read and who knows anything of European travel, and certainly Naples is one of the most unique cities in Europe, not only from its historical associations, yielding as it does interesting records of the ancient Greeks and Romans, which historical periods can be well studied in the Museum Nazionale, where is to be found all that is worth preserving from the excavations at Pompeii and Herculaneum. There is also to be found in the neighborhood the tomb of Virgil at Pozzuoli, and there also may be seen the remains of the amphitheatre of Seraphis. But it is not with the history of Naples that we have to deal, but with its present sanitary state, its climatical advantages and conditions, and its suitability for the residence of invalids.

Naples is situated on a bay, which is perhaps one of the most beautiful on the Mediterranean shores; it is commanded by three ports, and from the sea the view is most enchanting. Looking at the town, one sees that it forms two gently sloping amphitheatres, while standing back a little from the sea rises up Mount Vesuvius to the height of about 4,000 feet, and which during the night time is a magnificent spectacle when in eruption. That part of the city lying along the shore is not healthy or suitable for the residence of visitors, although a great deal has been done these last few years to improve the sanitary condition of Naples, and if the sanitary works are carried out as originally designed and intended by the authorities, Naples will be one of the healthiest cities in Europe, but up to now it has been one of the most unhealthy; also a new water supply has been brought into the town, replacing the horrible polluted sources of drinking water which had been in use, and which formed the only drinking supply for the inhabitants until recently. If this new water supply is looked after well, from a sanitary point of view, both as to drainage and supply, Naples, from being one of the most dangerous cities to visit, will be one of the most healthy and the most safe; always with the reservation that the hills about Naples, especially in the direction of the Via Vittorio Emanuele, where are situated the Hotels Bristol, Tramantano and others, are by far the best, healthiest and safest for visitors. The cause of the unhealthiness of the parts of the town immediately adjacent to the sea coast arises from the unhealthiness of the soil, due to the vegetable deposits which for centuries have accumulated, giving rise to malarial germs and typhoid of a malarial type, which at one time was very common, and to a large extent still exists in this locality. With a general improved sanitary state it is better than it was, but to invalids, for whom we write specially, we recommend the

higher lying ground, and the hotels which are placed a little way from this locality.

There are to be found in Naples several distinct climates. The same applies to the immediate neighborhood. The climate of Naples as a whole, is more humid than that of the French Riviera, less humid than that of Algiers, and the more you approach the hills and the neighborhood of Vesuvius the more tonic and bracing is the climate. The *Tramantano*, or north wind, in the springtime, is a cold wind, but except for great invalids it is not unhealthy. The effect of the Neapolitan climate is to produce a feeling of *bien être*, and a disinclination for everything serious, a languid, lazy, lounging about feeling, wishing to do nothing, think of nothing, or to be bothered. You see this also manifested in the faces of the natives, who spend their lives mostly in sleeping a couple of hours at mid-day, working a little in the afternoon, eating an ice, going to the theatre, getting up late in the morning, working a little until noon, and then repeating the same as the day before. It takes six Neapolitans to do as much work as an ordinary American workman in one day. The number of beggars in Naples is quite extraordinary; monstrosities of every kind show their amputated stumps, their distorted limbs, or their other deformities to the passer by. In fact, a Neapolitan will do anything but work. No doubt this is partly a racial character, but the soft, sedative climate has also much to do with it; therefore, when invalids go to Naples, they feel the effects of this sedative sleepy, pleasing air at once. Naples is full of interest for everybody, well or ill. To those who cannot make excursions there are the shops without number, filled with all kinds of curiosities; there is the magnificent museum, the finest in the world, with all its treasures of antiquities from Pompeii and the ruins of surrounding cities of an ancient time; there are in the streets continual sources of interest in observing the diversified dresses of the peasants from the neighboring hills; the ever changing panorama of a Neapolitan street never loses its fascination for American visitors. So grotesque, so droll, so full of humor, and sometimes also sights so sad, that men and women who study life and character in the faces and habits of mankind, cannot but find a rich field for observation in Naples and among its people. For those who can go excursions there are visits to Vesuvius, to Pompeii with its excavated streets, walking over pavement buried beneath the soil for 2,000 years, the evidence of a civilization dating back to centuries ago, and where can be read the sad story of the sudden deluge of showers of ashes which caught them amid their amusements and their occupations, and whose charred and fossilized bodies to-day can be seen by the modern Westerner. Then there are delightful visits to Capri, by the steamers which run regularly from Naples and back in the day. Capri, with its picturesque scenery and salubrious air, where you can find an appetizing lunch with delightful wine, Capri blanc ou bien Capri rosso, and in the sight of which is the Grotto Azzurra, which can be visited by boat in

calm weather, and which produces upon the visitor a marvelous optical effect. It is an exceedingly common practice to take a boy in the boat and let him dive for small coins to the bottom of the water, which here is not very deep, and the optical effect by the light entering through the narrow aperture which gives access to the cave is such that the boy looks as blue as the water in which he plunges.

Then, again, there is Sorrento to see, with its splendid orange groves; the finest mandarin oranges in Europe are grown here; its factories of cedar and olive wood, where are manufactured a great number of articles, which are sold in the summer at the Swiss health resorts and on the Italian lakes. At Sorrento are to be found excellent hotels, but for visitors it is a little dull except in the spring. With the climatical value of Sorrento we shall deal later on.

Amalfi is another delightful excursion to make; it is situated on the steep side of a cliff at the mouth of a gorge, and although now it has only 7,000 inhabitants, and is reputed to be full of beggars and dirt, it was in the twelfth century a thriving republic with a population of over 50,000. Lately very much has been done to make Amalfi a winter residence for invalids; a new road has been made, the water supply has been improved, hotels have been built; but with all this it has not made as much progress as was expected.

Of course, the great excursion, which everybody goes from Naples, is to Vesuvius. There are several ways in which it can be done. The best plan is to go by carriage to the foot of the crater, and then up the incline by the Funicular Railway. Cheating is the order of the day in Naples. Twelve or fifteen francs are asked for what eventually they are delighted to get two francs for, and, in making the ascent of Vesuvius you will be asked to engage guides with ropes to pull up to the very little piece at the very top where the Funicular Railway stops. You will be bothered and importuned by every kind of ragamuffin to accept his help, etc., but the only plan is to refuse to have anything to do with them, to take a guide with you who is recommended to you, either by your hotel, or by some good office, as Gaze's or Cook's, and leave everything to them and merely follow their instructions.

Last year the Funicular Railway, which, we believe, is the property of Messrs. Cook & Sons, the tourists' agents, was destroyed, or nearly so, by the lava during the great activity of the volcano.

Arrived at the top, if there is much eruption going on, it is exceedingly important to look out that the masses of lava do not come down upon your head. A very common practice is to watch a piece of lava, and as it reaches the ground in a red hot molten state to put a ten centime piece in the middle with a walking stick, and wait until it cools, when it will be found embedded in the mass of black cinder. People commonly take home these pieces of lava as a souvenir of their visit to the crater of Vesuvius. Every one will be impressed with the suffocating odor of what would

appear to be vaporized sulphur, both from its smell and from the yellow incrustations which are about the opening, but it is not sulphur, and I remember Prof. Franklin, of London, some years ago remarking to me that it gave him the impression also of sulphur or sulphurous acid, but upon analysis it was found to be chlorine in association; or muriatic acid and perchloride of iron as an explanation of this suffocating vapor.

It is impossible to speak of all the charms, the many other excursions which can be made from Naples, with advantage and interest both to mind and body, for we are chiefly concerned in studying it as a climate. Naples is the Eldorado of hypochondriacs. There is much to interest the wearied and overworked mind without fatiguing it. The climate gives to the irritable, excitable, depressed nervous system and tired brain quiet tranquility and a sense of rest. The sleepless sleep, the nervous dyspeptic finds he can digest better than before he came. The wearied and worried business man forgets his worries and enjoys the *dolce far niente*. The bronchitic, if he keeps out of the north wind when it blows, finds that he can breathe better than in a dryer atmosphere. The man or woman "with nerves" find themselves less nervous, and all around them there is a dreamy radiance which calms and restores the body and contents the mind. The people to whom Naples is suited in a climatic sense are those restless, hypochondriacal, overwrought people. Parsons, governesses, literary men and musicians, all of a highly strung, easily upset nervous system, find a heaven here, a heaven of rest and peace. Mendelssohn passed some time here, and felt, as he says, lazy, disinclined to work, and a wish to do nothing.

On the other hand, it must not be supposed that this sedative effect is one which goes on to a point of depression, but the reverse. Depressed, overworked, dispirited, hypochondriacal people find themselves surrounded by a lazy, sleepy multitude, and the hurrying and scurrying of busy feet, which is the order of the day in New York and London, is unknown here; consequently men who have been working at a high pitch are always obliged to drop into the quiet, slow habit of life, to take life easy, and it is thus they obtain the moral, physical, mental and nervous repose which gives them new force, new life, restoring their energies and the normal balance of their mental powers, which explains the great benefit often obtained by invalids without medicine, by a residence here.

Naples is not a place for consumptives, although in the first stages, where the health is otherwise fairly good, residence in spring in the hills in the north part of the town is very often most successful.

Sorrento is a spring place, and for those who wish to avoid the heat of Naples in the latter spring months.

Capri is a delightful place also in spring, and many people go there, where they find the air more tonic and the life more agreeable in May.

Amalfi is more sheltered than Naples. Though many cases of chronic bronchitis and asthma do

well here, it will, in my judgment, never become a first-rate health resort.

There is an excellent and experienced English physician in Naples (Dr. Gardiner), and there is also an English church. The service of steamers between Naples and the Eastern Mediterranean ports is all that can be desired, and the large steamers coming from India, Australia, etc., call here on their way to Gibraltar and England.

THE TREATMENT OF DELIRIUM TREMENS.

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ACUTE alcoholic intoxication, or delirium tremens, is one of the results of prolonged indulgence in beverages containing a large proportion of alcohol. A single "drunk," or several "drunks" with intervening periods of sobriety, during which no alcohol is taken, will not produce delirium tremens. These affect the system more or less seriously, but do not cause the mental aberration designated by the term delirium tremens.

Before one can have the distinction of presenting the symptoms of this disease, he must have acquired certain chronic morbid indications of alcoholic saturation; which are displayed by perverted functions of the nervous, circulatory, or digestive systems. It should be borne in mind that the active and acute symptoms have a chronic condition as a base.

Two forms of delirium tremens are generally recognized; a primary disease and the so-called associated delirium.

In this paper we shall only treat of the former. Cases of the primary form may be divided into three classes: First, the maniacal variety, in which great physical activity, wild delirium and violence are the predominating symptoms; secondly, a melancholic form, in which the hallucinations and delirium are of a depressed character, and in which a strong tendency to suicide exists; and a third class, which presents a condition of profound exhaustion, and the delirium is of a low, muttering character. Each of these varieties display different grades, from exceeding mildness to great severity. Sleeplessness, tremor, mental perversion, and more or less revulsion to food are constant in all cases.

Basing the treatment upon a rational appreciation of these facts regarding etiology and symptomatology, the question arises, What are the best methods to pursue?

Alcohol is a poison capable of destroying life, and its presence and symptoms should receive the same kind of treatment as that given other toxic states; elimination of that which is in the system, and neutralization of the symptoms produced.

First, then, all alcoholic drinks should be absolutely stopped. The tapering-off plan prolongs

the disease and interferes with speedy recovery. After having stopped the supply of poison we should get rid of that which is in the system. How can this be done? Physiologists tell us that alcohol is eliminated principally through the skin and kidneys; therefore activity of these parts will carry off the noxious material. With this idea in view the writer has for several years been in the habit of administering large quantities of hot water to these patients, giving from a half pint to a pint every half hour, until the desired end is attained. The result is to increase the flow of urine, and to produce profuse warm perspiration. The hot water likewise relieves the fearful thirst, which so often torments the patient; it quiets the stomach and improves the general condition. As a rule, after a few hours of such internal irrigation a craving for food is created, or a willingness to take food is displayed. Food is borne well if the stomach has been thoroughly washed of its accumulated filth. The diet should be hot milk, raw eggs and broths of various kinds, all of which are readily administered and assimilated. Another article of diet which is useful in these cases, if it is properly prepared, is beef tea. This should either be the cold, unboiled kind, or else the ordinary home-made beef tea, to which the white of an egg is added to each cupful. Nourishment should be given often, at least every three hours, and better every two hours. Several quarts of milk and from six to eight eggs can be safely taken in every twenty-four hours. In addition to milk being a prime form of nourishment, it is the grandest hypnotic known to medicine.

In a number of "tremens" cases there is presented, in addition to the symptoms directly referable to the alcoholic intoxication, a depleted condition of the entire system, due to a long absence from proper nourishment, which occasionally is so profound as to cause impending death from heart failure.

Common sense tells us here is the place for a stimulant. The weak pulse, the lowered temperature, and the array of asthenic symptoms generally show us the patient is near the danger line. Strong black coffee is readily obtained, and is usually all that is needed. If quick response does not follow its administration, sulphate or nitrate of strychnia should be used.

Sleeplessness is a frequent and distressing symptom, but its importance is not so great as many regard it. It is only a symptom of the disease, and not the disease itself. Overcoming it with large doses of hypnotics does not relieve the other symptoms of alcoholic intoxication. Many of the foremost authorities of the school of medicine most given to the use of hypnotics have warned their followers against such drugs in the treatment of this disease, especially during its early stages. Dr. Gowers states: "If hypnotics are boldly pushed they at last may act and the patient may die from their influence." The same author quotes Dr. Austie as believing "that when opiates fail to influence the brain and induce sleep they sometimes paralyze the heart." Hypnotics are therefore not held in as high regard now as formerly. They often fail to produce the desired

sleep, and frequently they increase the difficulties under which the patient is laboring, by inducing cerebral congestion or dangerous heart weakness.

Sometimes these risks must be encountered. For instance, when the patient has to be treated in a private house, or a general hospital, where there are other persons to be considered. Under such circumstances, if the patient is noisy, hypnotics cannot be avoided; but their use should never be excused upon the ground of proper treatment. One of the most popular sedatives and hypnotics at present is the hydrobromate of hyoscyne. Very considerable danger attends the indiscriminate use of this alkaloid. It should never be used in asthenic conditions, or where valvular heart diseases exist. It is not certain in its action, and occasionally increases the excitement. Unfortunately many physicians prescribe chloral, bromide of potash, bromidia and other drugs of this type. It is bad practice and should not be followed, except when the patient's noise is to be treated, and his personal welfare disregarded for the comfort of those within hearing.

Trianol is a new hypnotic much in favor at present. It is perhaps the safest of its class, but its use should only be countenanced when an extinguisher of noise is desired.

We have referred to only the most commonly used hypnotics. The list might be made very much longer, but objections could be cited against them all. Such drugs are more or less dangerous, uncertain in their action, and of but little assistance when they act as desired.

My friend, Dr. Matchan, while police surgeon of Minneapolis, found that in the early stages of delirium tremens, when the patient was restless, nervous, apprehensive, and had the "horrors" on closing his eyes, with considerable irritability of the stomach, capsicum, in drachm doses of the tincture, had a most excellent effect. It gratified the palate for something hot, relieved the distressing symptoms, and stopped the progress of the impending disease.

Concerning the remedies which may be indicated in this disease, while there is a wide range of drugs having symptoms resembling those of delirium tremens, the really useful ones are limited, and their indications are fairly well defined.

Arranged alphabetically we have the following: *Actea racemosa* is very useful in mentally depressed cases, when the tremor is the most prominent symptom. The delirium is of a mild type, and the hallucinations relate to small objects or animals. There is also persistent sleeplessness, as well as great physical restlessness.

Arsenicum alba is occasionally indicated in asthenic cases, when the patient is bathed in sweat and profound exhaustion is present; the lips and tongue are dry, and the patient wishes them moistened frequently. The stomach is irritable, food being rejected as soon as swallowed. The hallucinations are visual, and refer to small animals, but to which the patient is indifferent. Great restlessness exists, and suicidal tendency is often present.

Belladonna is particularly useful in cases in which there is great mental and physical activity,

with a disposition to be violent toward those opposing him. He seems to cherish delusions of persecution, as he is liable to assault a bystander, by biting or striking him. These spells of violence often come suddenly, like a clap of thunder out of a clear sky, and subside as quickly. There is sleeplessness, but with drowsiness which seems to be the forerunner of sleep, if it were not for the outbursts of violence.

The face is very much flushed, and the pupils are dilated and irresponsive to light.

Cannabis indica, in the writer's judgment, is the most frequently indicated and the most thoroughly reliable drug we have in our hands. When this drug is useful there may, or may not, be present great violence. While there is considerable talkativeness there is not the same degree of loquacity as found under some other drugs. The mind is so active that a number of subjects are introduced in a short space of time. Delusions and hallucinations are usually present, and they assume the characteristic form of this drug; they relate to large objects or to extended distances, or exaggerated spaces of time. They see large animals, or believe they are surrounded by numerous enemies, or imagine the room is of vast size, or that they have been ill months. The face is generally flushed, the pupils are dilated, they perspire profusely, and the principal emotion impressed on the countenance is surprise, although the expression may change frequently, as the different emotions come into play.

The pulse may be slow.

Hyoscyamus is another most excellent and useful remedy. It is especially indicated when persistent insomnia exists. The hallucinations are terrifying, and the patient makes frequent efforts to escape from his tormentors. There is a jactitation of muscles, rather than tremulousness. Quite frequently the patient keeps his arms waving, or his hands in motion. Loquacity is an almost constant symptom, the conversation being punctuated with profane or obscene language. There are also outbursts of careless laughter, sometimes alternating with loud weeping.

The above list may be almost indefinitely extended, but the few remedies named are those the writer has found especially useful and most frequently called for.

It is not presumed to embrace all the medicines which may be indicated, but simply those which will cover the largest number of cases.

Nux vomica, opium, stramonium, ranunculus, cantharis, and a host of others have likewise each its place, and may under certain circumstances prove as useful as any we have mentioned.

We have not attempted to present a list of remedies with their respective symptoms, culled from a work on *materia medica*, but to call attention to those remedies, with the indications upon which we rely, found useful in an extended experience in the treatment of the disease.

We have also desired to direct attention to the importance of treating delirium tremens as any other case of poisoning should be treated; *i. e.*, first eliminating the poison, and then relieving the effects of it.

SIX CASES OF HEMORRHAGE.*

BY GEORGE FREDERICK LAIDLAW, M.D.,
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IN bringing before you these six cases of hemorrhage I would emphasize the statement that, first and foremost, hemorrhage is a surgical condition and demands local measures. If, by any ingenuity, the principles of local hæmostasis can be applied, it is the duty of the physician to give these measures the first place in the treatment, and to regard even his most trusted remedies as uncertain and unreliable.

There are certain hemorrhagés, however, notably those from the bronchi, kidneys and bowels, where the bleeding point is internal and beyond our reach. In these cases we are forced to rely upon drugs which are soluble in the blood, and which can be carried in this way to the bleeding point, there to act either chemically or dynamically, as the case may be. It is with these latter cases that I propose to deal.

Case I.—Some years ago I was called to attend a young woman, twenty-five years of age, suffering from menorrhagia that had continued for thirty-one days. The patient was very weak and anæmic, the pulse small and rapid, and the temperature normal. There was no history of abortion nor any record of hæmatophilia in the family. The case proved obstinate. Millefolium and oil of erigeron in material doses had no effect upon the hæmorrhage. The patient grew weaker, and the stomach rejected nearly all kinds of food. The patient received in turn belladonna, calcarea, ipecac, sulphur, trillium, sepia, phosphorus, nux, crocus, china and sabina, all with no effect. She persistently refused local examination and treatment, but, during this time, I insisted on a measure that used to be highly recommended by one of our best known Homœopathic surgeons—that is, the introduction into the vagina of a long crystal of alum; but the oozing of blood continued. Fearing the consequences of the prolonged astringent action of the alum on the vaginal mucous membrane, the crystal was removed in twenty-four hours. As the patient absolutely refused other local measures, the treatment with internal remedies was continued.

About this time I was reading Dr. Compton Burnett's "Monographs on Diseases of the Liver and Spleen," and became very much interested in the doctrine of organopathy as there set forth. In pursuance of this doctrine I had already tried chelidonium, and found it to be a reliable remedy in most acute liver disorders, while ceanothus and squilla had served me well as apparent spleen remedies—that is for enlargement and discomfort in the region of the spleen—so I accepted, with

much confidence, the statement that thlaspi bursa pastoris was a remedy specifically adapted to primary disorders of the uterus. This was a welcome ray of light on the case of menorrhagia that was then engrossing my attention, and, at the next visit, finding the patient unimproved by the last remedy, I mixed ten drops of thlaspi tincture in water, and ordered a teaspoonful every hour. On the next day I was greeted with the welcome announcement that the bleeding had ceased. The next day and the next went by with no return of the flow. The patient slowly gained in strength, and, in four weeks' time from the cessation of the hemorrhage, she returned to work feeling well and strong. Since that time, now four years, there has been no return of the hemorrhage.

Some time after treating this case I noticed that thlaspi was coming into prominence in the Homœopathic journals as a remedy for hemorrhage in all parts of the body. In the case just related, therefore, it may be an open question whether thlaspi cured because it is a specific organopathic remedy for disorders of the uterus, or simply because it is a good hæmostatic. This question I will not pretend to decide. I may say, however, that I have used thlaspi in hemorrhage in all parts of the body, sometimes with great satisfaction, and sometimes with no result whatever. I have also treated many cases of non-malignant menorrhagia and metrorrhagia, and, so far as I can recollect, it has not failed in a single case. I have had no opportunity of trying its powers in the metrorrhagia that attends myoma or epithelioma of the uterus, and I would like to hear from some of our surgeons as to their experience with the drug in these conditions.

Case II.—In the second case, there was apparently a brilliant cure by thlaspi. The patient, a man of thirty-five years of age, in excellent general health, was accustomed to daily horse-back rides. One afternoon, after a specially long trip, he felt a bruised sore pain in the left kidney region, and noticed that his urine was quite bloody. The patient was growing very weak, presumably from the loss of blood. The urine deposited one-sixth of its bulk of bloody sediment, and from the character and location of the pain, I diagnosed a hemorrhage from the pelvis of the left kidney, due to the jolting ride, prescribed thlaspi tincture in 30 drop doses, four times daily, and enjoined rest in bed until the hemorrhage should cease. The next morning, the patient declared himself much stronger, and, as the urine contained less blood, he insisted on going to business. On the second day, that is, thirty-six hours after the first dose of thlaspi, there was not a blood corpuscle to be found in the urine by microscopical examination. The next day the patient resumed his horse-back exercise. From that time to the present, more than two years, he has had no return of the hæmaturia, nor any sign of calculus in the renal pelvis.

I have always suspected that this case was a coincidence and not a cure, for we know that hemorrhage from the renal pelvis or bladder sometimes ceases spontaneously, just as will a nose-bleed, or the bleeding of a cut finger. Still,

*Read before the New York County Homœopathic Medical Society, October, 1895.

the severity of the hemorrhage, and its prompt cessation under thlaspi, made it to me an interesting case.

Case III.—One reason for doubting the value of thlaspi in the preceding case is found in its utter failure in another case of hæmaturia due to a fibrous polyp in the bladder. The diagnosis is beyond question, for the polyp was finally removed by a supra-pubic cystotomy; but before this was done the patient, who was a lady fifty years of age, was under medical treatment for repeated attacks for bloody urine, associated with intense bladder pain and strangury. In the first few attacks tincture of secale, four times a day, checked the bleeding, but it soon returned in a violent form. Thirty-drop doses of thlaspi were continued for two days without the slightest effect on the hemorrhage. Ergot and hamamelis by the mouth were ineffectual. At last the patient was given gallic acid in 10-grain doses every two hours. In twelve hours the bleeding perceptibly decreased, and in thirty-six hours the urine was free from blood. The case was a surgical one, however, and the continued vesical tenesmus necessitated operative relief.

The gallic acid increased the vesical tenesmus, and had to be suspended on the third day, but in the week that intervened between the checking of the hemorrhage and the cystotomy, there was no return of the bleeding. The patient recovered splendidly from the operation, and is now perfectly well.

Speaking of gallic acid, I know of no more reliable remedy in hæmaturia, no matter what its origin, but the drug must be given in appreciable doses. It does not irritate the stomach, it is quickly absorbed into the blood, and as it is excreted rapidly by the kidneys, the urine becomes a solution of gallic acid that flows directly over the bleeding point. It is not a remedy Homœopathic to hemorrhage, but a local styptic, and, to my mind, its use in this way is not simply warranted, but is actually imperative upon the conscientious physician.

Now, lest any of you are beginning to think that the medical control of hemorrhage is a simple matter, I will refer to two fatal cases that have come under my observation.

Case IV.—In one the origin of the hemorrhage was obscure. The patient, an old gentleman, arose one morning and vomited a quantity of bloody fluid. Shortly afterwards he passed blood from the bowels. Ice was kept continuously on the abdomen and along the spine, and small pieces of ice were swallowed. Ten-drop doses of secale and 10-drop doses of thlaspi were given by the mouth. The hemorrhage seemed to be controlled for a time, but after some hours the bloody vomiting and purging came on afresh; the patient grew weaker and succumbed.

Case V.—The other fatal case referred to was one of true purpura hemorrhagica. The patient was a man aged thirty-five years. At first he complained of intense aching pains in the back and limbs, and had a slight cough, just as if he were in the early stage of the grip. At the end of the second day small purple spots appeared

on the limbs, and the pains were somewhat relieved. On the third day he had a nose-bleed. Then the gums began bleeding, and he expectorated blood-stained mucus. The purple spots were appearing in great numbers over the abdomen, chest and limbs. Thlaspi tincture was given in 30-drop doses, together with arnica and hamamelis, but the remedies were useless. The patient soon began to pass bloody urine, to vomit blood, and to pass blood from the bowels. Blood came from the nose, the ears, even from the eyes. The purple spots on the skin increased until there was not an area as large as a quarter of a dollar which was not greenish-blue or purple, and the patient literally turned black. He became comatose, and died thirty-two hours after the first appearance of the purple spots.

In these two cases, in my opinion, the only effective treatment would have been by hypodermic injection, preferably of ergot. It is possible that if thlaspi could be given hypodermically it would act well in such a case as this. I would hesitate to inject the ordinary tincture. It might be too irritating, or it might cause coagulation. Perhaps some enterprising pharmacist will prepare an extract of thlaspi for hypodermic use. It is a promising drug, and well worth the experiment.

Case VI.—The last case that I will present to you occurred one year ago, and embodies my present ideas in the treatment of alarming hemorrhage. It was a case of hæmoptysis in a man forty-five years of age. It was a first attack in an otherwise healthy man, and was apparently brought on by a severe spasmodic cough that had lasted several weeks. Still, a younger brother of the patient had died of consumption, another had died of pneumonia, and an older brother, still living, had had frequent hemorrhages.

To show you the severity of the hemorrhage I will mention the treatment pursued from the very commencement of the case. The patient's brother instituted, at once, a rigorous course of hæmœstasis. He made the patient lie down upon the nearest couch, kept him perfectly quiet, forbidding all talking, put an ice-bag along the upper spine and another broad, flat ice-bag upon the chest; put pieces of ice in the patient's mouth, administered 5 drops of the tincture of secale and 1 drop of the tincture of arnica every half hour, and sent for the doctor.

On my arrival, this treatment had been under way for four hours, but with no apparent effect upon the hemorrhage. The patient was lying upon a couch, himself and his surroundings all spattered with red drops. The pulse was rapid, the breathing was labored, and with every breath one could hear in the air passages an ominous rattle or gurgle, the nature of which was demonstrated, at frequent intervals, by a short cough and the expectoration of several mouthfuls of clotted or fluid blood. The point of the hemorrhage was probably in the right bronchus.

I gave 10 drops of thlaspi and a 10-grain powder of gallic acid. In half an hour, the thlaspi was repeated, but unfortunately the patient had swallowed considerable blood, which nauseated him, and free vomiting ensued. With past ex-

periences in hemorrhage vivid in my memory, I saw that this was not a case in which one could depend upon the absorption of drugs by the stomach, so I resorted without delay to the hypodermic injection of ergot, in the form of Sharp & Dohme's Ergotole, which is $2\frac{1}{2}$ times as strong as the officinal fluid extract. The first dose was 10 drops. In half an hour, as there was no diminution in the hemorrhage, he had another injection of 20 more. In half an hour more I could perceive a distinct diminution in the hemorrhage. In three hours the injection of 20 drops was repeated, and, thenceforth, every four hours, night and day, he had an injection of 20 drops of ergotole. I found that the effects of the injection lasted little more than four hours, and that if $4\frac{1}{2}$ hours went by with no injection, the hemorrhage would break forth afresh.

On the fifth day there was only an occasional blood streak in the sputum, and the interval between the injections was increased to six hours. The tincture of thlaspi was then added in 10-drop doses four times a day. On the tenth day the injections were stopped, but, as a matter of precaution, the thlaspi and 10-drop doses of ergotole by the mouth were continued until the end of the second week.

I was amazed at the terrific dosing with ergotole that the patient had endured without showing toxic symptoms. I should say that on the seventh day of the treatment he was taken with an intense epigastric pain, with vomiting and high fever. As this apparent gastritis subsided while the ergot was still being used, I do not think it was an effect of the drug.

This patient was intensely anæmic and made a slow recovery, but has now regained his lost weight, and is in evident health. He has never manifested any signs of phthisis.

To sum up my experience with the medical treatment of hemorrhage I may say that, in severe hæmaturia, my first choice would be gallic acid, 10 grains every two hours. In moderate hæmaturia, thlaspi, in 10 to 30-drop-doses, may be tried.

In menorrhagia or metrorrhagia use thlaspi in the same dosage.

In hæmoptasis of slight grade, thlaspi, arnica, hamamelis, lycopin, etc., are all sufficient, but, if the hemorrhage is profuse, and especially if there is vomiting, some form of ergot should be given hypodermically.

In profuse hemorrhage of any kind that threatens life, it is insufficient to depend upon the absorption of material doses by the stomach.

Herein, I think, lies the value of the highly potentized remedies. I have repeatedly seen their effects produced by dissolving the pellets on the tongue. Vomiting does not seem to prevent their action. But if you are using material doses they must be handled in a material way, and in an urgent case, the only method of insuring their entrance into the circulation is by hypodermic injection. Of the drugs suited to hypodermic use ergot is the best.

HYSTERO-MYOMECTOMY.*

BY AUGUST SCHACHNER, M. D., LOUISVILLE, KY.

THE specimen which I exhibit for your examination is the result of an hystero-myomectomy. The patient was a negro woman aged thirty-eight years, whom I first saw two months ago and diagnosed a myoma of the uterus and advised an operation. Shortly before the operation symptoms referable to the bladder were pronounced, and in addition to this the woman had a marked mitral regurgitant murmur; she was also a very asthmatic subject. Almost every day she would have an attack of asthma. I prepared her as carefully as I could for the operation, and made known the possible dangers of trouble that might arise during the process of anæsthesia, etc., to her husband. Both consented to the operation, which was performed thirteen days ago. Ether was used as the anæsthetic and no trouble was encountered. The highest pulse rate since the operation has been 114; highest temperature 100 F.

I adopted the abdominal method for obvious reasons, the principal of which is that I believed it would occupy less time than the other; the tumor, together with the uterus, tubes and ovaries, were drawn out of the incision, a neude was thrown around the mass, and it was cut off. In view of her condition, I believed, in this case, it was best not to enucleate the neck of the uterus. This was thought to be the safest method, since the principal danger was from the anæsthetic. There were some adhesions to the posterior part of the tumor, which was easily separated. The neude is now about ready to come away, thirteen days after the operation, and I think we can safely say that the woman is going to make an uninterrupted recovery.

I report this case simply from the fact the patient was the subject of pronounced heart trouble, yet she took ether as well as any one, and there was no evidence of heart failure during the operation. No trouble followed the administration of the anæsthetic, such as we might expect from a patient suffering with organic heart disease.

I might mention that the bladder in this case was situated considerably above the pubes; just why it was so located, did not appear clear.

REMARKS.

Dr. J. W. Irwin: Upon several occasions I have administered ether and chloroform to patients who had valvular affections of the heart, without causing any bad effect. I never hesitate to give chloroform in any condition of the heart, and have never yet seen any bad results following its administration in such cases.

Dr. W. H. Wathen: Dr. Schachner was correct in using the extra-peritoneal method in this case, because of its rapidity and the probable danger of continued anæsthesia. Otherwise I am

* Reported to the Louisville Clinical Society. Stenographically reported for this journal.

in favor of either the intra-abdominal, but extra-peritoneal method, or total extirpation, because recovery is much more rapid, and our patient is left in a better condition. Some time ago I studied this question closely as regards the mortality of these operations, the extra-peritoneal, the intra-abdominal but extra-peritoneal, and the total extirpation. By taking such men as Bantock with the extra-peritoneal, Baer and a few others with the intra-abdominal but extra-peritoneal, Martin and others with the total extirpation, I found the mortality to be about the same. No universal method can be adopted for treating the pedicle, and each operator must adopt that method which is best suited to a given case. Again, one operator is more proficient in one method than another, because of greater experience with it, so he would be justified in employing a method that would not be adopted by another operator.

In the case reported I think the operation was more easily performed by the abdominal route than through the vagina, because of the large pedunculated tumor which has been shown us, but had there not been a pedunculated growth of considerable size the operation could have been done more easily through the vagina, and more satisfactorily, and with less danger.

COPAIBA AND OIL OF SANDALWOOD IN CYSTITIS.

BY E. M. HALE, M. D., CHICAGO.

IN my article on cystitis which appeared in a late number of the *MEDICAL TIMES*, I mentioned that I had always succeeded in curing catarrh of the bladder by the use of internal medicines.

I lately treated an obstinate case in which I feared that my assertion was an "empty boast," but the result cleared me of that charge.

The patient was a woman of fifty, whom I had twice treated for the same affection. The first attack occurred ten years ago, when I cured her with copaiba. That attack lasted about two weeks; the second attack was about five years ago, and lasted three weeks. Copaiba, turpentine and cubebs were used without benefit for two weeks. Then chimaphila cured in a week.

The last attack lasted four weeks. Chimaphila was used the first two weeks, but failed to cure. Then pichi was given for a week with no benefit; uva ursi for four days, when the mucus and purulent discharge became so abundant that I prescribed the following:

R Balsam copaiba.....	ss.
Oil sandalwood.....	ss.
Oil cinnamon.....	i.
Emulsion acacia.....	iiiss.
Simple elixir.....	iii.

Sig. A desertspoonful every four hours.

This cured the disease in four days.

I was somewhat surprised at the rapid subsidence of the catarrh, and almost expected there would be a recurrence. The mixture was continued in the teaspoonful doses for a week, when, no mucus appearing in the urine, it was sus-

pended. It has now been a month since the mucus disappeared, and not a drop of it has appeared. I do not know which drug is entitled to the credit. It would have been more scientific to have given one drug at a time, but, as the patient was cured promptly of a very painful disorder, it does not much matter.

CORRESPONDENCE.

AUTHOR, EDITOR AND CRITIC: THE HOMŒOPATHIC TEXT BOOK OF SURGERY.

To the Editors of the NEW YORK MEDICAL TIMES:

Taking it that it is the policy of your journal to be fair and courteous to all publications reviewed in your pages, and their authors and editors, I ask the privilege of making rejoinder to the reviews of the "Homœopathic Text Book of Surgery" by yourselves and "M. O. T.," appearing in your issue for April.

On page 119 you criticise the mechanical construction of the book. It is probable that you have seen one of the volumes sent out from the bindery before we saw the necessity of passing upon each book as issued. You surely cannot rightly complain of the paper, the typography, the press-work, the color plates nor the present binding, for in all these the new book has been pronounced by competent critics the full equal of any single volume work on its subject. The color work is especially excellent. It was chiefly done by the Riverside Press, Cambridge, a house justly celebrated for superior workmanship. Even a casual glance must convince an unprejudiced observer that in this particular the book is superior to its single-volume rivals, and even to Dennis' excellent four-volume "System of Surgery," while in the matter of typography, paper and press-work it excels many of the best, and equals all except Dennis'. It is true that some of the zinc cuts and half-tone plates do not come up well, but those below par are possessed of no special value, after all, and whatever of disappointment may arise in this relation is more than compensated for by the excellence of the color work adorning the sections supplied by Helmuth, Lee, Laidlaw, Shears, Walton, Van Lennep, Macdonald and the writer.

As evidence that the *TIMES* was not very careful in its examination, it is sufficient to call attention to the fact that it has credited the section on bacteriology and pathology, which it commends, to Laidlaw, whereas it was contributed by Chislett, of Chicago; and in suggesting that the various articles are little more than a reproduction and rearrangement of ideas gathered from numerous works on surgery recently issued, it has practically held up against twenty-five surgeon-authors, resident all the way from New York and Boston to San Francisco, that they are plagiarists or not sufficiently well informed in their specialty to commit their ideas to paper in their own language. Of course, the essential facts of surgery are to be found in all surgeries. But this book is pre-eminently the work of our own men, clothed in their own language, reflecting their own views and work, and illustrated largely by illustrations original with them and their colleagues. To suggest otherwise is to do violence to truth and to do injustice, whether intended or not, to as good and true men as adorn any profession.

With reference to the criticisms of M. O. T., I desire to say they are those of a rejected contributor. When this work was announced, M. O. T. communicated with me under date of August 20, 1894, offering for use the following articles from his pen:

- "1. The value of bromine as an antiseptic in surgery, in poisoned wounds of all kinds, and for fumigation.
- "2. Hot water and the rubber bandage for sprains.
- "3. Chloride of ammonia in hypertrophy of the prostate and in prostatitis.
- "4. The treatment of carbuncles by circumscribing with collodion and injecting with a solution of carbolic acid and glycerine.

"5. The treatment of ingrowing toe nail without the knife.

"6. The medical and oil treatment of appendicitis.

"7. The cautery in spinal irritation.

"8. Fluid cosmoline for acute inflammation of the middle ear.

"9. Guaiac in chronic ovaritis."

In offering these for insertion in the new volume he assured me: "I shall bear you no ill if you do not care for one or all, for it is my intention to give them to the profession in a condensed form for ready reference in a small book. I would not allow any of the articles to go in your book *without being given credit for every one.*"

Here it will be seen that M. O. T. considered the senior editor of the new surgery—there are two editors—competent to pass upon his preferred contributions, while he now bemoans that a more capable surgeon did not serve as editor. This may be consistent, it may be honest—it looks neither. At that time he expressed satisfaction that I had taken up the work of building such a book, and informed me that two years before he had attempted the construction of a work along the same lines, but had failed to interest the publishers, applied to, the ones the *TIMES* refers to as better book-builders than the builders of this one. It is but natural to believe that this fact, coupled with the other fact that the matter submitted by M. O. T. was not used, had much to do with prompting him to go out of his way to attack the work of more than a score of surgeon-authors, nearly every one of whom are recognized in their respective localities as masters of their art.

In attempting to get up a book upon the plan of the one he condemns, M. O. T. would lead us to infer that he considers himself competent as a surgical editor. Has he had more experience in editorial work, in book construction, or as a surgeon, than the editors of this volume? Hardly! It may be well for me to let it be known that the effort was made to get our best known surgeon, Hel-muth, to pass upon all the manuscripts of the volume under discussion before they went to press, but without avail. The very magnitude of the work made the task an uninviting one. Nor was it necessary. For I consider myself exceedingly fortunate in having secured the co-operation and editorial assistance of so competent and classical a surgeon-editor as my associate, Dr. T. L. Macdonald, to whom whatever of credit for the surgical editing of the volume is deserving justly belongs. Even M. O. T. could have done no better.

An analysis of our critic's criticisms shows that besides complaining about the supposed unfitness of an editor to whom he submitted his manuscripts for acceptance or rejection, his chief complaints relate to the consideration of carbuncles, sprains, prostatitis and appendicitis, subjects all covered—in his way—by the papers offered me. I have the right to infer, therefore, that disappointment and chagrin at their omission, which was probably not known to the *TIMES* when his review was accepted, prompts, in good part, at least, his criticisms, and with the facts before the readers of the *TIMES* I have no fear that his conclusions in relation to the book will weigh very heavily with them.

But M. O. T. is careless, also. He says he fails to find reference to the Northrop method of anæsthesia. I beg to refer him to the closing paragraph on this subject by Macdonald, on page 117, and also to the reference to the Northrop method on page 1117, by Pratt. The authors referred to have given all the credit to this subject that it seems to deserve, especially when it is remembered that the combination of oxygen and chloroform is not in general use, not even in the college and hospital with which its author is connected.

In conclusion, I have clearly shown that the review of the *TIMES* is not a carefully written one—I am quite willing to admit, judging from its nature, that it may have received one of the imperfect copies which were sent out direct from the bindery before we were aware that imperfect copies were being issued—I have shown that M. O. T.'s review is not the review of an unprejudiced critic. I have also shown that he has placed himself in a very peculiar position before the profession by now

criticising as questionably competent the editor to whom he submitted his own manuscripts for acceptance or rejection. All the authors and editors of this work ask or expect from the journals and profession is justice. The book must stand or fall upon its merits. But we feel that we have a right to enter protest against carelessly written reviews which do not review, and to enter protest against caustic and adverse criticism by one holding the relation to this volume that is held by M. O. Terry. It should not be a case wherein

"A falcon, tow'ring in her pride of place,
Was by a mousing owl hawked at and killed."

Very respectfully, C. E. FISHER.

Chicago.

DR. TERRY'S REJOINER.

To the Editors of the NEW YORK MEDICAL TIMES:

Sirs: In replying to the distinguished publisher and editor of the "Homœopathic Text Book of Surgery, I think it unnecessary to disclaim feeling in the least chagrined on account of the fact that he failed to appreciate articles, the substance of which, to a large extent, has been adopted by surgeons throughout the country. I am under obligations, however, to the doctor, for saving me the disgrace of being connected with a book so glaringly defective, and so dangerous to follow in minor and important details. I feel now as when I sent the articles to him: "I shall bear you no ill if you do not care for one or all." The inference which the doctor draws, of my placing confidence in his judgment to pass wisely on my articles, is simply school boy logic. The reason why I gave up the plan of urging the construction of a work on surgery by surgeons of the Homœopathic school, the same to be under a skilled editor-in-chief, such as Dr. Hel-muth, was that the publishers in Philadelphia insisted on introducing articles involving potencies. The plan of the work was approved by a large number of our surgeons, such as Hel-muth, Lee, Biggar, Schneider, and Pratt.

I had supposed one could calmly discuss the defective features of a work of this sort without having it construed into a personal attack. I bear no ill will toward the doctor for what he has said, or shall not for what he may say of me in the future, if he wishes to be personal. I have been criticising a book, not a man. So soon as a man steps down from the plane of reasoning into the mire of vituperation I am through with him *personally*, but not with a production which affects the good name of the profession.

I have not given this book a thorough going over. It would be necessary to write a book in order to do so. If some of the distinguished surgeons, contributors to this volume, will come out in print as they have to me personally, perhaps the editor-in-chief will drop the idea of having received a vindictive criticism of his work.

Very respectfully, M. O. TERRY.

Utica, April 18, 1896.

MONTREAL LETTER.

To the Editors of the NEW YORK MEDICAL TIMES:

Permit me to express personal admiration for your manly editorial under the heading "Calomel," in your January number. The *TIMES* has been accused of "straddling the fence" so often and so persistently that it is a real pleasure to be able to point to this article as a refutation of the insinuation.

As I understand it, the policy of the *TIMES*, or rather its creed, is a thorough going belief in the law of similars, with the reservation that, as the knowledge of symptoms, and the study of the secondary effect of drugs is by no means complete, a true physician with a conviction that his mission is the relief of human suffering, is free to use physiological medicine in those cases where curative results cannot be obtained from the secondary working of drugs as now known. I may be an exception, but nevertheless I can truly say that leaving out cases classed as mechanical or chemical, those conditions which cannot be successfully treated by

the drugs as now known in their secondary action, are very, very few. I personally hold the belief that, in any curable case in which I have failed, the reason is to be attributed to either my lack of knowledge of the materia medica or to my lack of capacity to read aright the symptoms, pathological and symptomatic. I strongly deprecate a present judgment of the law of similars, believing that centuries will elapse ere it becomes a perfect system, capable of standing all criticism. But I believe that the profession should be urged to believe and act on the belief that the development of Simila did not cease with Hahnemann, and that the more thoroughly the field is developed, the less will medicine need the primary effect of drugs. It is a discouraging fact, but practically the real development of our materia medica ceased with the death of Hahnemann. Homœopathy differs from the dominant school in that its development demands human sacrifice instead of that of the lower animals. The age of heroic self-martyrdom seems to have passed.

While I fully realize the sincerity of the TIMES in its abhorrence of the sectarian name of Homœopathy, I have no alternative but to assume it, for 999 per cent. of my prescriptions are pure Hahnemanian Homœopathy. And on this basis I have built up and held a large practice, without advertising. I should, in my idea, be as justified in leaving out the prefix Homœopathic, as a notary would who, because he served as a church warden once a month, called his profession that of a church warden. My physiological medicine bears about this relation to my Homœopathic medicine.

On one point especially do I disagree with the respected editors of the TIMES, and that is that the recognition by the dominant school of the law of similars will be hastened by the dropping of the name Homœopathy. If Luther had dropped the apparently inadequate name Protestantism, would this faith have been the power in the world for good it is to-day? If Hahnemann had not assumed a distinctive and sectarian name for the doctrine of Similia, would it have had the regulating effect on the dominant school it has to-day?

Man is a bigoted animal, a cowardly animal, and force has always been a greater power in the world than gentleness. The greater the temporal power the closely welded Homœopathic school obtains, the speedier will be the recognition of its guiding principle by the despotic and arbitrary dominant school of medicine. I recently begged a bright young practitioner, a graduate of my own University of McGill, to at least make a careful study of the secondary effects of drugs, so that he could at least say that he was rejecting a theory as useless which he had carefully investigated. His reply was the stereotyped one: "I do not want to know anything about it, and am quite satisfied with my present system." Yet the TIMES would wish us to drop the name, Homœopathic, in deference to this kind of obstinate, mulish bigotry. I say the way to get them to study Simila is to hammer into them the name Homœopathic until they are overwhelmed by the material success of the inferior people called Homœopaths.

HUGH MATHEWSON PATTON.

Montreal, January 6, 1895.

DR. CARLETON AND HIS STATE SOCIETY.

The following correspondence has been sent us by Dr. E. Carleton, with the request that we publish the same.

FEBRUARY 26, 1896.

DEAR DOCTOR:

Referring to pp. 216-7, "Transactions of the State Society, 1895," I observe that there is no mention of me or of my remarks, in the discussion of antitoxine; while all the rest who participated are named, with synopsis of their remarks. If you are willing, please tell me why this is so.

Yours truly,

EDMUND CARLETON.

To John L. Moffat, M. D., Secretary Homœopathic Medical Society of the State of New York, 17 Schermerhorn street, Brooklyn, N. Y.

BROOKLYN, N. Y., March 2, 1896.

MY DEAR DOCTOR:

I am very sorry to have lost your remarks on antitoxine at our October meeting. It must have been that some one came up and diverted my attention for the moment. Since reporting our proceedings myself, I have been troubled quite a little by people interrupting me by questions, etc., and even the telling them to come up later, or go to some one else causes me, I know, to miss something. You may be interested to know that our Kings County society last year instituted a proving (three provers) of Behring's antitoxine. The results were very meagre—practically nothing, so far as corroboration among the provers went—the few symptoms that could be attributed to the drug are almost all found in the pathogenesis of carbolic acid!

Yours,

MOFFAT.

Dr. E. Carleton.

MARCH 13, 1896.

DEAR DOCTOR:

Your favor of March 2d received, in answer to mine of February 26th.

This is a remarkable case, which it might puzzle a professor of psychology to make clear. For my part, I am unable to see how every speaker before and after me should be reported, and no mention made of me or my remarks, while as a matter of fact every one in the room listened intently to every word of my short speech, which was parliamentary and to the point, and at the same time the Secretary was busy jotting down the words. Even more remarkable is the fact that the speaker who followed me should be very well reported, with one exception, namely, his opening sentence, which was this: "Dr. Carleton is right."

My curiosity has been considerably aroused, and that must account in part for my intruding at this time, but a much weightier reason is that you seem so completely grief stricken over the accident. Do not let it weigh you down too heavily. Incidents have occurred before. I am very philosophical over this one. Yours truly,

EDMUND CARLETON.

To John L. Moffat, M. D., Secretary Homœopathic Medical Society of the State of New York, 17 Schermerhorn street, Brooklyn, N. Y.

PHYTOLACCA DEOANDRA FOR EPITHELIOMA.

Goodman points out (*South Carolina Medical Journal* for April) that while the root and berries of the above-named plant have been largely experimented with, and have been found to possess therapeutic properties of great value, yet the green leaves of this plant possess a property which alone would entitle it to rank among the most valuable remedies of the materia medica. We refer to its power of destroying epithelioma. The method of using the remedy is to bruise the green leaves to a pulpy mass; collect the expressed juice in a shallow receptacle, as a plate; allow it to evaporate to a thick, pasty consistency; spread a portion of this on a piece of silk or other suitable cloth, and apply to the morbid growth.

The plaster should be removed and the part washed twice daily. The remedy causes severe pain. It has a selective action for the morbid tissue; follows out all the irregularities of the epithelioma; causes, as it were, its liquefaction and removal, and then acts as a cicatrizing for the open sore.

As soon as all the morbid tissue is destroyed, a bed of cicatricial tissue begins to spread from the periphery, and as this occurs the plaster should be cut smaller each day, so as to conform to the size and shape of the surface to be covered by it.

Unlike other remedies, it can be used fearlessly, does not endanger the patient, combines within itself a caustic action and healing property, and requires to be used in the same manner from beginning to end.—*Therapeutic Gazette*.

BIBLIOGRAPHICAL.

COCA AND ITS THERAPEUTIC APPLICATION. By Angelo Mariani. With illustrations. Third edition. New York: J. N. Jaros, 52 West Fifteenth street, 1896.

This little volume, dedicated to the medical profession, comprises all that is known of this wonderful drug. A copy may be obtained free by addressing as above and mentioning this journal.

DIETS FOR INFANTS AND CHILDREN IN HEALTH AND IN DISEASE. By Louis Starr, M. D., editor "American Text Book of the Diseases of Children." Philadelphia: W. B. Saunders, 1896; 12mo.; price, \$1.25.

A most useful and convenient little volume of diet sheets for the baby, which can be torn out and modified to suit the individual case, with full directions.

INFANTILE MORTALITY DURING CHILD BIRTH AND ITS PREVENTION. By A. Brothers, B. S., M. D. William Furness Jenks' Prize Essay of the College of Physicians. Philadelphia: P. Blakiston & Co.

The author has aimed to present a careful bird's eye view of his subject, without the detailed account found in the text books, and to point out the advances made in recent years in the interest of the unborn child previous to labor, during the critical hours of actual labor, and in the earliest period of life succeeding labor. The author has brought to his task a large experience, excellent judgment and marked skill in presenting his facts and conclusions.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONERS' INDEX: A work of reference for medical practitioners: 1896. Fourteenth year. New York: E. B. Treat. Price, \$2.75; pp. 728; duodecimo.

The present volume maintains the reputation of this work for practical reference in progressive medicine.

The therapeutic review for the past year is written by Prof. Hare, and of course is a masterpiece and up to date.

Our readers can make no mistake in ordering the book.

The price charged is certainly merely nominal, and dependent upon its enormous circulation. The volume is copiously illustrated.

DIAGNOSIS AND TREATMENT OF DISEASES OF THE RECTUM, ANUS AND CONTIGUOUS TEXTURES. Designed for practitioners and students. By S. G. Grant, M. D., Professor of Diseases of the Rectum and Anus, University and Women's Medical Colleges. With two chapters on cancer, by Herbert William Allingham, F. R. C. S., Eng. Illustrated with sixteen full-page chromo lithographic plates, and 115 wood cuts in the text. The F. A. Davis Publishing Co., New York and Philadelphia, 1896; \$3.50.

The writer has the happy faculty of presenting his ideas in that choice English, and clear and concise language, to impress the facts at once and strongly upon the mind. The classification of subjects is such that any desired point can be reached at once. The illustrations are all new, most of them being photographs from cases of the author and of Dr. Allingham. Among the best chapters in the book, and much needed at the present time, are *Rail-roading As An Etiological Factor in Rectal Diseases*, and *Auto-Intoxication and Auto-Infection From the Intestinal Canal*. It is seldom a book upon any speciality reaches our table with so much to please and so little to question as in the book under notice.

A REPERTORY OF HERING'S GUIDING SYMPTOMS OF MATERIA MEDICA. By Calvin B. Knerr, M. D. Philadelphia: F. A. Davis Co., for the Estate of Constantine Hering, 1896; pp. 1,200. Price, \$10.

The touching tribute in the dedication of this great volume is what might be expected by those who were familiar with the relations which existed between the author and

he who was "more than father, friend, adviser and teacher," to whom the work "is affectionately and reverently dedicated."

If it has ever been questioned whether Dr. Knerr was the proper one to continue the work Dr. Hering left unfinished, the doubt will be dispelled by a perusal of this herculean effort.

The order of arrangement is the anatomical, and is divided into forty-eight chapters.

The abbreviations, ciphers, signs, rubric words, marks of distinction which indicate the relative value of symptoms, and other minor points, all show with what care and patience the labor has been done.

The author most properly emphasizes the statement that "the prescriber has to deal with both objective and subjective facts, but should always bear in mind that *individualization is the life of therapeutics*."

A chapter is appended on the important subject of drug relationship, and the volume closes with a useful index.

Those who use books of this class will find this, we are confident, superior to any extant.

The typographical part of the work, also accomplished by loving hands, is all that could be desired.

BELLEVUE HOSPITAL MEDICAL COLLEGE AND THE COMMISSIONERS OF CHARITIES.

President Croft, of the Board of Charities, says that the Commissioners intend to make an investigation, to ascertain if it is for the interest of the city to allow the corporation of the Bellevue Medical College to continue to have the use of the building owned by the city on the Bellevue Hospital grounds. The latest contract which the corporation made with the Commissioners of Charities and Correction for the use of the building will expire in 1898. By its terms the corporation is not obliged to pay any rent for the building, and pays less than \$4,000 a year for repairs. The medical college enjoys exceptional advantages on account of its nearness to Bellevue Hospital and the Morgue. Only two other medical colleges, the University Medical College and the College of Physicians and Surgeons, are allowed to share in the benefits of the institution.

The practice obtained by graduates of the three medical colleges who get places on the Bellevue Hospital staff is considered of great value to young physicians, and positions in other hospitals under the control of the Commissioners of Charities are regarded as almost equally desirable. The County Medical Society has tried to compel the Commissioners to fill vacancies in the medical and surgical divisions of the hospital after competitive examinations open to the graduates of all medical colleges, but Justice Andrews, of the Supreme Court, has denied an application for a mandamus to that end.

The Commissioners of Charities have not obtained much information as to the revenues of the Bellevue Medical College, but they expect to get such information by means of the investigation which they have decided to set on foot. It is known, however, that the revenues are large, on account of the fees of the medical students, and that, after the expenses are paid, the net profits are divided among the members of the faculty. Each member of the faculty, therefore, receives a personal dividend each year, and the dividends have been so large that some members of the faculty have bought lots in East Twenty-sixth street, as near the hospital as possible, as a new site for the Bellevue Medical College, in case the contract for the use of the building on the hospital grounds cannot be renewed.

This is an old story we know, but now we hope this institution will have justice meted out to it by the Commissioners.

Itching, which is so often found in connection with eczematous conditions of the anal and genital regions, can be greatly relieved, according to Dr. Cantrell (*Phila. Polyclinic*), by the use of an ichthyol wash, ranging in strength from 1 to 2 drachms to the ounce of water.

The New York Medical Times

A MONTHLY JOURNAL.

OF

MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

EDITORS.

ROBERT GUERNSEY, M.D.

ALFRED K. HILL, M.D.

Communications should be addressed, NEW YORK MEDICAL TIMES, 180 West Fifty-ninth Street, Central Park South. Published on the first of each month.

NEW YORK, MAY, 1896.

REMOVAL.

The office of this Journal will be removed, May 1st, to 180 West Fifty-ninth street, Central Park South.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 19 Liberty St., N.Y.

TREATMENT OF PNEUMONIA IN CHILDREN'S HOSPITALS.

THE April issue of the *Archives of Pediatrics* contains articles from the physicians of hospitals in this city, Philadelphia and Boston, on the treatment of pneumonia in children. There is a great similarity of treatment in all these institutions. Patients are admitted to the St. Mary's Free Hospital for Children between two and fourteen years of age. The attending physician, Dr. George Montague Swift, in cases of broncho-pneumonia, puts the patient into a room at the temperature of about 75°. Upon a kettle of boiling water is placed a vessel of beechwood creosote or pine needle oil, taking care that the creosote does not boil down and become too pungent. The combination of warmth, steam and evaporating creosote makes a soft, agreeable atmosphere which he finds most soothing to the inflamed and irritated bronchial mucous membrane, and the cough speedily softens; expectorants are seldom needed. If an anodyne is needed on account of pain, restlessness or excessive cough, 1 to 2 grains of Tully's powder is given. Castor oil is given occasionally, when there is an abundant bronchial secretion. If the secretion is copious and watery, nitro-glycerine is used; alcoholic stimulants are given when needed, and this he finds to be the case very often, as the patients are weak generally from previous bad nourishment. Muriate of ammonia is given if an expectorant is needed. Externally, the chest is rubbed with camphorated oil or turpentine. Dur-

ing the acute stage the food is milk. In lobar pneumonia, which he believes to be a disease distinct from broncho-pneumonia and decidedly infectious, the effort is made to keep the children comfortable in well-lighted and well ventilated rooms, securing to them nourishment, great relief of pain and sleep.

Chloride of calcium is given (hepar. sulph.) in doses of 2 to 5 grains, every two or three hours, dissolved in a compound syrup of sarsaparilla. His theory is that this particular salt is quickly absorbed into the blood, increasing its alkalinity, and thereby putting the blood serum in better condition to overcome the toxin of the disease. Hepar is undoubtedly of great benefit in lobar pneumonia, but we give it in very much smaller doses than the author. The oil-silk jacket is not used, but counter irritants of mustard and flax-seed for a few minutes until the parts become red, or the application of a flax-seed poultice. For relief of pain and excessive cough Tully's powder is given, and sometimes, to promote sleep, phenacetin or sulfonal. If the tongue is much coated and the bowels not freely open small doses of calomel are given. In this form of pneumonia the author thinks alcoholic stimulants are seldom required.

Dr. S. Emmett Holt, of the Babies and the Nursery and Childs' Hospital, prescribes in bronchial pneumonia as few drugs as possible, and no expectorants, using the stomach for food and stimulants, relying upon external means or applications to control special symptoms. These applications are similar to those used in St. Mary's. His treatment is pure air, careful feeding, judicious stimulation, with the regular use of counter irritation and inhalation, the frequency of these depending upon the severity of the cough, the amount of bronchitis and the abundance of the secretion. Lobar pneumonia is managed much in the same manner, except stimulants are given later and in many cases not at all. Counter irritation is not used except in cases with much pleurisy, and inhalations are employed only for the relief of distressing cough.

Dr. Crozer Griffith, of the Children's Hospital, Philadelphia, thinks that fever *per se* may be disregarded in a great measure, as it is generally the nervous symptoms which require treatment. Should these, however, seem to depend on the existence of fever, he resorts to sponging with water from 70 to 80°. When the respiration becomes embarrassed, the heart failing and the strength waning, he finds plunging the patient into a bath of 103 to 105° will often rouse the failing powers in a remarkable degree. He does not

use the cotton jacket. Counter irritation is used occasionally, but generally in the form of turpentine stupes. Coal tar antipyretics are used occasionally.

Dr. Buckingham, of the Children's Hospital, Boston, says medical treatment is purely symptomatic; many patients go through the disease without any medicine whatever.

Dr. Northrup, of the New York Foundling Hospital, says the treatment is mostly symptomatic. At the onset, the bowels are relieved by calomel. For pain, localized, intermittent, poulticing and opium in the form of Dover's powder or paragoric. High temperature, warm sponging with alcohol and water; ammonium carb. is given as a stimulant and expectorant, and nitro glycerine as a cardiac stimulant.

IN THE HEART OF THE ROCKY MOUNTAINS.

A SHOUT comes to us from a seeker of health and pleasure, who in her wanderings has visited almost every nation and climate in the world. It is the enthusiastic shout of the old Greek, "*Eureka, Eureka*," but formulated in different language. She says: "Send all the lame, the halt, the exhausted sons and daughters of care and mental toil to this life giving air, this fountain of health among the most beautiful and magnificent scenery in the world.

"Three years ago the Raymonds invested in this hotel and the surrounding grounds a million of dollars. The largest spring of boiling saline sulphur water in the world is here. As the skill of the architect and the landscape gardener were taxed to the uttermost in the hostelry and the grounds, so too, the sanitary engineer was given full liberty, with an unlimited supply of funds, to utilize this boiling spring of mineral water to its fullest extent for pleasure and health. The result is something marvelous. The old Romans never dreamed of such a combination of luxury.

"In the bath-houses and Roman bath-rooms you can enjoy a bath in any form, from the vapor to the shower, and stepping out from your dressing-room you plunge into a sea of water at a temperature of 95°, covering an acre of ground. Here, on the coldest day in winter, as you take the plunge in the open air, the exhilarating effect is beyond description, and is worth a journey from the East to experience. And then, with every nerve tingling with pleasure and alive to enjoyment you go into a hotel, every line of which is an artistic study, and sit down to such a dainty table as I have never seen in America!" The picture drawn by our friend of the Colorado at

Glenwood Springs, Col., was so graphic, so full of life and beauty, and so thoroughly appreciative, that we make no apology for reproducing it in the *TIMES*.

TANNALBIN.

THIS preparation has been used in the German hospitals in certain forms of intestinal catarrh with marked benefit. Dr. Von Enyd, from his hospital observations, concludes that tannin albuminate (tannalbin) heated for hours at a high temperature, is resistant to gastric digestion and is dissolved only in the intestines.

Even large doses employed for weeks do not give rise to alteration in the gastric functions. Within wide limits, tannalbin is a perfectly harmless remedy, possessing the great advantage of being absolutely devoid of taste.

In chronic intestinal catarrh of uncomplicated natures it is a reliable and certain remedy, producing the most satisfactory results. In diarrhoea of phthisical cases it is also of much value. In severe and extensive anatomical lesions of the intestinal mucous membrane it is, of course, without effect. In acute diarrhoea of functional or catarrhal nature its action is admirable.

In the exhibition of T., it is advisable to always administer large doses, at least in the earlier stages; in adults 1.0 gme. (15 grn.) a number of times daily—better two or three powders at intervals of one or two hours; in children, 0.5 gme. (7), once, twice, or three times daily. After one or two days' use the dose may be gradually reduced.

A REMEDY FOR BLACK EYE

A WRITER in *Medical Progress* says in this trouble, as well as in rheumatism, sore or stiff neck, there is nothing to compare with a tincture or strong infusion of capsicum mixed with an equal bulk of mucilage of gum arabic, with the addition of a few drops of glycerine. The bruised surface is painted with this mixture and allowed to dry on; a second or third time, if necessary, speedily relieves.

Last summer Mr. Chesebrough, the originator of vaseline, mentioned a new preparation for these troubles, in which the capsicum was combined with vaseline and used as above directed. It was so successful in our hands that it is now almost a daily prescription.

NIKOLA TESLA, in experimenting with the Röntgen ray, thinks he has found a physiological effect which shows the existence of material streams penetrating the skull, so that it may

be possible by these strange appliances to project a suitable chemical into any part of the body, bringing the internal organs as directly in contact with remedial agent, as is now the case with the throat or nasal passages. Tesla found under the influence of these rays a soothing effect, with tendency to sleep, and a sensation of warmth in the upper part of the head. Following up these observations, he thinks, will lead to important therapeutic results.

SURGERY WITHOUT PAIN.—A recent meeting of the Philadelphia County Medical Society was rendered particularly interesting (*Am. Med. Rev.*) on account of the presentation of a paper by Dr. T. Parvin, on the new method of abolishing the pain of surgical operations without the necessity of employing ether or chloroform. This is the system suggested and practised by the well-known German surgeon, Schleich, who, by its use, has been able to perform practically all of the minor and many of the major operations of surgery without the slightest pain to the patient, and without depriving him in any other way of his consciousness.

By the method of Schleich there are prepared three solutions of common salt, in which are dissolved different quantities of muriate of cocaine and morphia. The part to be operated upon is thoroughly cleansed with an antiseptic solution, and the surface brought to a low temperature by a spray of chloride of ethyl. Into this area of the skin, which, by the action of the spray, has been deprived of all sensation, the salt solution containing the cocaine and morphine is injected by means of a special hypodermic syringe, numerous punctures being made in all directions. This renders the deeper structures insensible to the surgeon's knife, and from a period of from twenty minutes to half an hour the patient is not conscious, so far as actual pain is concerned, of extensive cutting and sewing.

The new method differs in an important degree from the ordinary employment of hypodermic injections of cocaine. The strength of the drug which has been used in the past is about 1 part in each 25 parts of the solution, while in the Schleich method there is often employed a strength of only 1 in 10,000. In the former, however, only a few drops of the solution are employed, while in the latter the tissues surrounding the part to be operated upon are thoroughly infiltrated with the solution. With the small quantity of the cocaine employed by Dr. Schleich, it is apparent that something more than cocaine is responsible for the local anæsthesia

so perfectly obtained. In the opinion of Drs. Keen, Ashhurst and Morton, who discussed the merits of the new system, the infiltration of the tissues with the solution, and the distension and consequent pressure upon the small nerves were responsible in a large measure for the absence of pain when the incision by the knife is made.

To indicate the manner of employing the method of Schleich, and to show the entire absence of pain, one of the surgeons had the solution inserted beneath the skin of the arm and an incision an inch long made and sewed up before the Society.

OPIUM.—Physicians find no better nerve stimulant among the so-called narcotics than opium; the great trouble is in the tendency to push it too far, obtaining its narcotic rather than its tonic action. In small doses, when specially indicated, it acts better than caffeine, Kola nut or cocoa. An exceedingly interesting work has recently been issued by the Harpers, by Edwin Ford Weeks, entitled "From the Black Sea Through Persia and India." Some of the facts he presents, drawn from personal observation and from the records of the medical staff of the army, are worthy of careful notice.

"Wherever," he says, "a medical officer reported on the condition of his men just returned from active service in Burmah or elsewhere, it appeared that the best soldiers, morally and physically, those who were always exempt from such maladies as dysentery, fever, cholera and rheumatism, were the opium-eaters; they were able to go longer without food or stimulants, and to do more work. The testimony of physicians, both European and native, was almost invariably in favor of the drug, when used moderately, in the simple form known to native consumers. Surgeon-General Sir William Moore said 'he had often smoked opium, and really did not see where the wickedness and immorality came in. As a matter of fact, one might see more wickedness and immorality in a London gin-shop in half an hour, even on a Sunday night, than in an opium-shop during a whole year.' It has been found that opium is cheaper than wine or spirits, less detrimental to the system, and just the right agent to stimulate the indolent Oriental nature, as well as to counteract the weakening effects of a vegetable diet and scarcity of food. Many a poor 'Ryot,' who can hardly pull himself together for the want of proper nourishment, is enabled by its aid to do a good day's work, while at the same time it serves him as a specific against the maladies resulting from unhealthy

surroundings. * * * While scientists, philosophers, and empirics in Europe have been experimenting for ages to find the Elixir of Life, these simple Orientals have contented themselves with producing, by Homœopathic doses of opium, effects analogous to those hoped for from the discovery of Dr. Brown-Séquard; and, if they have not succeeded in renewing their youth, have certainly managed to make it last longer."

INFLUENCE OF MUSIC UPON THE HAIR.—A recent inquiry into this subject by an English physician has developed some singular facts, which are stated as follows in *La Revue Medicale*: Baldness affects about 12 per cent. of the entire male population; but in the case of doctors this proportion is doubled. Composers of music belong to the general average; while instrumental performers, with certain exceptions, almost invariably retain their locks until quite late in life. Brass wind-instruments are fatal to the growth of hair; the trombone especially is said to denude a player's scalp in less than five years. Just the opposite effect is produced by the piano and the violin, which both prevent and arrest the falling off of the hair, as is proved by a long list of European virtuosos who have died at advanced ages with magnificent *chevelures*. No explanation of these statistics is attempted by the author; but they can be verified, he says, by observing the musicians in theatrical orchestras, and also the members of regimental bands, among whom "trumpeter's baldness" is proverbial.

ASBESTOS FOR SURGICAL DRESSINGS.—In a paper read at a meeting of the McKean County (Pa.) Medical Society, Dr. E. O. Kane advocates the use of asbestos as a surgical dressing. He regards the fibers of this mineral as admirably fitted by their softness for this purpose, and on account of their non-combustibility they can be readily and completely sterilized by exposure to fire. "Appreciating the difficulty one is under in preparing dressings that shall be positively aseptic," he writes, "and of retaining them so for any length of time, it had always been my custom to have them all thoroughly impregnated with bichloride of mercury, iodoform, or boracic acid, as shortly as possible before using them. This procedure entailed much loss of valuable time, and when operating in accident cases at a distance from my hospital, I was always in dread lest, during transportation to the scene of action or after being spread out among the flies and dirt

upon the table of the farmhouse or lumber shanty, or upon the cushion of a cabin car, a new horde of germs find entrance to them. I am, therefore, satisfied that my present method of using only fireproof dressings, besides saving time, is the only safe one to pursue, and the results which I have obtained since making use of them have more than justified me, I am sure, in so believing. Asbestos dressings of all kinds can be kept as carelessly as if they were germ proof. * * * My custom is now to carry with me in my buggy case a compact parcel (asbestos materials are very compressible) containing a sufficient supply of dressings of every sort necessary to meet the requirements of general operative surgery. When preparing for an operation I lay out upon a table, board or chair the amount and sort of asbestos material which I expect to use. When the operation is completed and I am ready to apply the dressings, I instruct my assistant to place them upon the coals or in the flames of the nearest stove or fire and allow them to remain there for a few moments, usually until they begin to assume a cherry red, and then remove them with a tongs, fork, or whatever else is convenient, and spread them out before me on a clean napkin or piece of paper. Then I dust them with iodoform, aristol, or other antiseptic powder, should such be desired, and, as they cool rapidly, proceed at once to apply them to the wound. When working in my operating room I have a specially constructed receptacle made of wire netting, not unlike a grid-dle, in which to retain the dressings while subjecting them to heat. I find this unnecessary and cumbrous, however, to carry with me about the country, observing that an ordinary tongs or toasting fork answers the purpose. Asbestos goods are now manufactured in such variety of forms that even from a country hardware store the surgeon can supply himself with the materials necessary to dress every kind of wound or injury.

A MATERIA MEDICA conference will meet in Detroit, June 16th, two days preceding the meeting of the American Institute. One of the leading questions to be discussed is: "Has the law of similars ever been unequivocally demonstrated by the deductions from general practice, and do we not require its more formal proof by inductive experimental research?" Dr. Conrad Wesselhoft will present the scientific side of the question with his usual ability and impartiality. Dr. Wesselhoft's statement of facts and his deductions, will form an interesting chapter in therapeutic science. No more interesting or profitable subject could be discussed at the present time

than that which will come before this conference and we trust it will be met in that judicial and thoroughly scientific spirit which can alone give it value and practical importance in this age of demonstrated fact rather than theory.

THE Board of Health are manufacturing a stronger and more concentrated antitoxin, doing away, to a certain extent, with disagreeable symptoms. The new preparation is furnished to institutions free, and to the profession generally, at the cost of manufacture.

COUNTING BLOOD-CORPUSCLES. Dr. Judson Daland, of Philadelphia, has invented an instrument for counting blood-corpuscles, according to the *Physician and Surgeon*. It works on the centrifugal-force principle, and accomplishes the measurement by means of comparative bulks. A quantity of blood is placed in a finely-graduated tube and the latter revolved at a speed of about 1,000 revolutions a minute. The corpuscles divide by force of gravity, and form on the side of the tube in easily-traceable divisions of red corpuscles, white corpuscles and serum. The new method permits of larger, and, consequently, more representative quantitatives being used in experimenting, besides doing away with actual microscopic counting.

SOCIETY REPORTS.

SOME VAGARIES IN RECTAL PRACTICE.*

BY JOSEPH M. MATTHEWS, M.D., LOUISVILLE, KY.

In an address before the Louisville Clinical Society, the speaker in part said: It is nearly universal with authorities to divide external hemorrhoids into two different kinds—one a tag of skin, that may become inflamed under certain conditions, and the other a thrombus, or rupture of a blood vessel, and the running of blood out into the tissues. The majority of those who have written upon the subject believe that external hemorrhoids of the second variety—a blood clot—may be caused by pressure of the child's head, in parturition, for instance, and that it amounts to only a dilatation of the blood vessels, with a contained clot. Experience and investigation have taught me that this is not true, but that there is necessarily rupture of a blood vessel and the flowing out of blood into the tissues, in which it coagulates. Therefore, I have been led to believe that this variety of external pile is not often caused by pressure of the child's head, tumors or what not, but by force; a strain, a blow, a kick or anything that would rupture the blood vessel, often constitutes the cause of the second variety. That the other variety—inflammation of a tag of skin—does often occur is no doubt true, as far as the diagnosis is concerned.

As regards treatment, authorities advise that external hemorrhoids should be lanced; that a bistoury should be run through them and the clots turned out. There never

was a greater vagary in my opinion than this. When it is considered that a person suffering from this variety of hemorrhoids is an invalid for two or three weeks from excessive pain, caused by the inflammation, the procedure is not a very small affair. If we follow the universal practice of lancing an external hemorrhoid to let the clot out, any one who has ever practiced this method has seen that he causes a condition which will last longer than it would take Nature to reabsorb the clot. Therefore, in lieu of accepting this doctrine, I remove the *entire* pile by pinching it up with a pair of forceps and extirpating it, leaving simply an open wound, and in from twelve to twenty-four hours the patient is able to resume his business, only a small wound remaining to heal by granulation.

It has become the common expression that all operations for hemorrhoids can be done under the effect of cocaine. This practice should be condemned by every physician and surgeon, not only on scientific but also on practical grounds. It can be demonstrated that cocaine is more dangerous than any general anæsthetic. There have been more deaths reported from injecting the tissues around the rectum with cocaine than have been reported from both ether and chloroform combined. Cocaine is going forth to the profession in the writings of its advocates as a very simple anæsthetic in dealing with hemorrhoids, and it is said to be devoid of danger, while it is an incontrovertible fact that death is much more common following operations upon the rectum since cocaine has been used. The patient should always have general anæsthesia for rectal operations, no matter what the nature of the procedure may be.

Internal Hemorrhoids—I shall not discuss the pathology of internal hemorrhoids; it is a mooted question as to exactly how this tumor is formed. More especially do I want to speak of the fact that all conditions around the rectum, at least nearly all, are generally called hemorrhoidal, when in truth this is a great vagary.

As regards the *symptoms of hemorrhoids*, those laid down by authorities, some at least are vagaries. Internal hemorrhoids, without complications, really have no symptoms. If the pile is a small one that does not bleed, it cannot be noticed by any symptom; if it is a well-formed tumor, an internal hemorrhoid, it has no symptom except protrusion. Whenever there is pain, whenever there is simple itching or any of the other so-called symptoms of hemorrhoids, this is simply a complication.

It seems to be the common opinion that internal hemorrhoids are easily diagnosed, not only by prominent symptoms, but by touch, by making an examination of the rectum with the finger. I want to make the point very positive that it is the only condition or disease of the rectum that *cannot* be diagnosed by touch. Hemorrhoids may be ever so large and yet not be detectable in this manner. There is no way of diagnosing internal hemorrhoids except by visual inspection if they have protruded, or by a specular examination.

Another vagary is that small piles, of the *capillary* variety, amount to but little, when in truth they are the only dangerous variety of hemorrhoids, either external or internal. Many persons have lost their lives through a small internal capillary pile bleeding.

Another mistake, I believe, is the *classification* of internal hemorrhoids. Authorities universally classify them as *arterial*, *venous* and *capillary*. I do not believe there is any internal pile that does not partake of both the arterial and the venous variety—whether one predominates over the other no one is able to say. One is as much venous as it is arterial, and *vice versa*.

As to the Treatment of Hemorrhoids—If I were to follow my own inclination in the treatment of internal hemorrhoids I would be too dogmatic, because I would say, use carbolic acid injection *never*. I would be inclined to say, use the Paquelin cautery *rarely*, when there is so simple an operation, one so devoid of danger, and so easy of execution, as throwing a ligature around the hemorrhoid, transfixing, and removing it. By this method the blood supply of the part is effectually shut off; there is very little danger of septic infection, and I do not believe as much can be said of any other method. I regard this

* Louisville Clinical Society. An abstract of Dr. Matthews' paper, and discussion, stenographically reported for this journal by C. C. Mapes.

treatment as superior to all others as far as this affection is concerned.

Fistula in Ano.—I suppose mistakes are made every day in the diagnosis of fistula in ano from one standpoint—that is, the character of the fistula with which we have to deal. Authors are not sufficiently explicit; they do not go into the details with a minuteness commensurate with the gravity of the condition. It is not enough to say that fistula in ano is a sinus, with an *external* and an *internal* opening, constituting a *complete fistula*; if with an external opening, being an *external incomplete fistula*; or if with an internal opening, constituting an *internal incomplete fistula*, when we remember that it is one of the most destructive conditions from which the human body can suffer. I have seen fit to make a different division than other authors make in this disease. My division has been *progressive fistula* and *non-progressive fistula*. There are many conditions about the rectum in which we can advise a patient against operative interference. If there is no physical defect, we might in some cases say that the fistula would not injure the patient. We have seen men who could go through life with such a condition without apparent harm. But if one applies this rule to all fistulae he will wreck his patient, and perhaps cause death from sepsis in the course of a few weeks, certainly in a few months, if the fistula is of the *progressive* variety; I mean by this a condition attended with an acute inflammatory action and rapid burrowing of pus. We know that pus will burrow, by continuity, into the vagina from the rectum; it will burrow to, and even into, the bladder, from the rectum; it may destroy the perineum, especially in the female; it will often extend into the buttocks, undermine the sphincter muscle, etc., and do so very quickly. Under these conditions I say that every surgeon having the welfare of his patient at heart should advise an *immediate* operation for the fistula.

Fistula in ano in the female is a very serious condition. I have now under observation a young married woman who had an abscess in the left side of the rectum extending to the labia, which was allowed to go for two months without being opened, and at last was lanced. I have been three months trying to cure the fistula. I doubt if I succeed, because the process has by its destructive course branched through the perineum, involving the vagina and the sphincter muscle, with different channels running in many directions. Any surgical attempt at cure must of course destroy the septum, and also the sphincter muscle. I do not think enough attention is given to the respective difference occurring in the male and female.

Another vagary is, placing the greatest stress upon finding the *internal opening of a fistula*. I have spoken of this before, and have had my views criticised. Every surgical work gives general directions for finding the internal opening of a fistula when there is an external opening. Of what importance this is to the surgeon I have never been able to understand. I have had several patients come to me to be operated upon for fistula who had been refused by other surgeons, because the latter could not find an internal opening. That a person has a fistula is proved by the fact of the existence of the external opening; it is not necessary to use a probe at all; the condition calls for an operation. The fact of there being an external opening is enough to decide in favor of an operation; the fistula should be freely slit up, following the channel to the bottom, and, of course, the internal opening will then be found. That a surgeon should refuse to operate because an internal opening cannot be found before the operation is to me a vagary.

Ulceration of the Rectum.—Ulcerations of the rectum from *benign* causes are usually simply erosions, and are very small affairs. In an experience of eighteen years, my record book will not show a dozen cases of *benign* ulceration of the rectum.

I believe there is only one mode of treatment for tuberculous ulceration of the rectum, and that is thorough *curettement*.

My experience has been that when ulceration exists in the rectum to any degree, it is due to a *special diathesis*—malignant, syphilitic or tuberculous.

As regards *carcinoma of the rectum*: Perhaps my views

are sufficiently well-known in regard to colotomy for carcinoma of the rectum not to require any further mention, and all that I shall say is that I am nearly convinced that any operative procedure upon the rectum for carcinoma is unwarrantable in the larger percentage of cases. Kraske has done the profession good service by telling us of his method of extirpating the rectum. It may be said of his operation that by it more of the rectum may be removed than by any other method; but I think the surgeon should consider a little more than that, and that is, whether he is justified in performing any severe operation upon a patient when he recognizes that very little, if any, good will thereby be accomplished. I do not believe, therefore, that when carcinoma exists, involving as much of the rectum as would warrant Kraske's operation, one case in ten would justify the operation.

I read once, from the pen of a distinguished gynecologist an article in which he said he doubted very much whether hysterectomy should ever be performed for carcinoma of the uterus. I am very much inclined to adopt the views of this gentleman, as far as carcinoma of the rectum is concerned.

Kraske's is a difficult operation, and the man who undertakes to extirpate the rectum by this method, with the idea that it is an easy procedure, will find himself very much mistaken. Of all operations that I have ever undertaken, complete extirpation of the rectum is one of the bloodiest and most difficult that I have ever witnessed or tried to perform. Are we warranted in doing so fearful an operation when we can promise so little? Mayhap there is some little relief, perhaps none.

I shall not take time to speak of the vagaries of *official surgery*, except to denounce it. There is not a day passes but I find some new evidence against this fearful criminal practice. Men in every city of the Union are given to cutting out the rectums of men, young girls, boys and infants for relief of diseases outside the rectum. They are running wild with the idea of reflexes from the rectum, and healthy rectums are extirpated for so-called heart disease, dyspepsia, neurasthenia, etc. I think the profession at large should be outspoken in this regard; not that we have anything personally against the operators, but to save human life and human wretchedness. If medical men were aware of the number of people who have submitted to this outrageous practice—it is more than a vagary—they would agree with me that it should be denounced by every medical journal and every medical man in the United States.

Another vagary, I take it to be, is the frequency with which *prolapse of the rectum* is supposed to exist. In my experience, extending over eighteen years, I have had but six cases of prolapse of the rectum in the adult. I have had several hundred cases of prolapse—so diagnosed. It is true that a great many physicians call large protruding hemorrhoids prolapse of the gut. This is a mistake. When I say that I have only seen six cases, I mean in the adult. Young children often have prolapse of the gut which will take care of itself under simple treatment.

From the literature of the subject one would be forced to believe that the simple affection of *pruritus ani* is often the symptom of some other trouble. Some very eminent authorities say that it is. I must differ positively from that position. I do not believe that *pruritus ani* is often a symptom of anything except *pruritus*. It is a distinct affection, not dependent upon nor a symptom of any other trouble. *Pruritus* that comes from a discharge from the rectum—that is, the itching—is not *pruritus per se*. Therefore, I believe that *pruritus* is a distinct disease.

Fissure of the Rectum.—I only want to speak of a vagary in this connection so far as the treatment is concerned. In my work on "Diseases of the Rectum," in commenting upon the different methods advocated by various authorities, I referred especially to the writings of Dr. Adler, of Philadelphia, and stated that I was sorry to see so learned an authority contending for local treatment of fissure of the rectum that occupied weeks and months to effect a cure, when relief could be afforded so quickly and so effectually by slight division of the sphincter muscle. In the last few months a number of articles have been written on the subject of treatment of fissure of the

rectum by local measures. Dr. Adler saw fit to reply to my criticism, saying that he believed that I was mistaken, that I was not borne out in my statement by facts as regards dilatation, when he had demonstrated that the condition could be cured by local applications.

I contend that there should be but one method of treatment, and that is dilatation. A word as to the method of dilating. Nearly every one who has written upon this subject has explained that they mean forcible dilatation; breaking the sphincter muscle if necessary. This certainly is a vagary. The more I treat fissure, the more I am satisfied it can be cured by slight dilatation, often by means of a small speculum, dilating until slight pain is evinced, and in the majority of instances the fissure disappears. Then, I say, what is the use of taking three weeks, three months or a year to cure a condition that can be relieved permanently in a few minutes?

Fissures of the anus are often found in children, and can be cured by the mother simply anointing her finger and slipping it into the child's anus, practicing a little massage for five minutes at a time, and repeating this if necessary. If this plan is followed, a complete cure will almost invariably result.

DISCUSSION.

Dr. John Ford Barbour: I was particularly interested in what Dr. Mathews said concerning tuberculosis of the rectum; would like to ask whether in his experience it is common to find primary tuberculosis of the rectum, or whether it as a rule is secondary to tuberculosis in some other part of the body? I was called to see a young woman in the lower part of the city, who had been treated for some time by another physician for tuberculosis of the lungs, and she gave the history of a great deal of pain with her stools, and of passing about a half teacupful of pus with each stool. She did not appear to be very ill, but I found her temperature in the axillary region $105\frac{1}{2}$ F. I took another physician with me and made an examination of her rectum, and found a small grayish ulcer about the size of a nickel just above the internal sphincter muscle, and, I presume, there were other ulcers further up the bowel where we could not get at them. This ulcer was dressed with a little iodoform, and the woman put upon constitutional treatment, also upon injections of linseed oil and iodoform; there has been considerable improvement. I have examined this woman's lungs very thoroughly, and cannot find any evidences of tuberculosis in any other part of the body except the rectum; there are no evidences of syphilis; there is no cachexia or other indications of cancer. I concluded that the trouble must be tuberculosis, and the fact that her husband has this disease would seem to justify this conclusion.

Dr. W. L. Rodman: I certainly feel very much indebted to Dr. Mathews for the thorough *résumé* of the different pathological conditions of the rectum, and think that he has rendered us distinct service, not only in regard to the pathology of these conditions, but also in pointing out to us how we can best treat them. From beginning to end, I, in my limited experience, am inclined to agree with almost, if not every, position he has taken in his rather extensive remarks. In the first place, I am ready to follow and accept his teaching as to the pathology and treatment of external hemorrhoids. While, as he has said, nearly all authorities advocate simply incising the external pile and turning out the clot, I believe that the doctor's practice is infinitely better. I think they should be excised and was under the impression until I heard his remarks, that many of the English surgeons followed this practice. Certainly in this country, however, the practice is well-nigh universal to simply incise the tumor and turn out the clot. I examined a man that I had treated by this method the other day. The tumor had recurred, and I found the patient in even a worse condition than he was before. The clot re-forms, it becomes more painful, inflammation results, and I have often myself felt that I have done the patient more harm than good by making an incision. Occasionally, in some of the smaller tumors, I have incised the clot and heard nothing further from them, but I am satisfied from my limited

experience in this practice that the method the doctor has outlined is best suited to the condition, and for the last year or more have been following it, and have never yet had occasion to regret it.

I furthermore fully coincide with what he said as to the use of general anaesthesia in these cases, rather than cocaineizing the tumor and removing it. I believe not only here, but in other situations, cocaine is a more dangerous agent than general anaesthesia. Many practitioners, to escape the dangers of general anaesthesia, which are real, simply assume greater dangers when they use a sufficient amount of cocaine to produce complete local anaesthesia of the parts to be operated upon. It requires a deeper degree of general anaesthesia for an operation in this situation than almost any other region of the body, so that to use a sufficient amount of cocaine to excise several large piles would be more dangerous than general anaesthesia. Cocaine is very rapidly absorbed into the system from the rectum, and its effects are often alarming. I have only used cocaine in this situation on one occasion, which was for an operation on an anal fistula. When the patient walked to the front door to leave my office I noticed something very peculiar about him; he walked as though he had been drunk. His symptoms caused me a great deal of anxiety, and were such as to suggest cocaine poisoning. I felt somewhat uneasy, and would not allow him to leave my office for an hour or two, because his condition was such that I was quite apprehensive as to ultimate results.

In regard to the pathology of internal piles: I was rather surprised to hear Dr. Mathews say that the ordinary strawberry or capillary pile was a more dangerous lesion than the other forms of hemorrhoids. I can understand how they would bleed freely at times, but it is not clear to me why they should bleed more freely than an ulcerated pile in the form of a tumor.

The next question touched upon: I am sorry he did speak further on the subject, and tell us the exact method in which he uses the ligature in removing internal hemorrhoids. Not long ago I read an interesting paper in *Mathews' Medical Quarterly*, by Dr. Dundore, of Philadelphia, concerning the use of the ligature in removing internal piles—he had written to a number of surgeons all over the United States, a half dozen of us here in Louisville, asking our methods of using the ligature. In reading the article very carefully I noted that the vast majority of American surgeons used the ligature according to the method of Salmon, which is improperly called the method of Allingham. I believe Dr. Mathews uses a different plan; I think he transfixes the pile, then ties on both sides.

Concerning the treatment of anal fistula: Dr. Mathews' remarks in this connection were very clear indeed, and I fully indorse them. I have always believed that it was utterly useless to prolong the operation in searching for a supposed internal opening; I can see no use of it, and have never been able to see anything rational in this plan of treatment. I have seen just such things occur as the doctor has spoken of. I have seen most excellent surgeons examine for thirty minutes at least for a supposed internal opening, which they failed to find. I have seen them try again and again and fail, and then decline to operate upon the case, because they could not find an internal opening. We may have a blind, or external incomplete fistula, without any internal opening at all. It has been my practice in operating upon such cases to cut from above downward, and in this way you are always sure to discover the internal opening if one exists. Another point Dr. Mathews makes, as to the progressive or non-progressive condition of fistula, I think is a good one; I had never thought of it in this connection before. Some of these fistulae are the most intractable conditions or affections we have to treat.

The only other point, I believe, that I care to speak to, is the question as to whether or not we shall operate upon cases of malignant disease of the rectum. I am very glad to hear Dr. Mathews speak as emphatically and as positively as he does about the excision of the rectum for malignant disease. I have taken the same position, not only as to cancer here, but other points throughout the alimentary tract. It seems directly at variance with the

pathology of cancer for a man to hope to eliminate the disease successfully by a surgical procedure, unless done at the earliest stage. These growths are never encapsulated; they always extend further than they seem to do, and the nature of the tissue is such that we cannot remove sufficient of it to give even a reasonable hope that the trouble will not recur very promptly. I believe the position he takes as to Kraske's operation is a fair and just one, borne out by the pathology of the disease. If there be such a condition of the rectum from malignant disease as would justify Kraske's operation, there is no reasonable hope that we can either prolong life or give decided relief. The trouble will almost invariably recur inside of three or six months. I have never yet myself seen a single good result after excision of the rectum. I think, however, this may be going a step too far; if the disease begins at the verge of the anus, and I know it does not begin here very often, or if the trouble has not extended beyond an inch or an inch and a half from the anus, we might practice excision with some hope of a radical cure, if the operation is performed sufficiently early.

Dr. Louis Frank: Concerning fissure in children: I have seen quite a number of cases of this sort, where there has been a great deal of trouble and constant crying. When this was cured by dilatation, as described by Dr. Mathews, all trouble was overcome.

Dr. T. C. Evans: In regard to the use of cocaine, I think the profession generally will agree with Dr. Mathews as to performing operations under cocaine. Those of us who use cocaine not only every day, but many times a day in nose and throat work, hardly ever have any signs of trouble from it; but it is always used with a certain amount of precaution, and I think when you inject cocaine into a point where you cannot control it and prevent its absorption into the general circulation, you are taking great risks, much greater than you would by giving general anesthesia; particularly is this true in the vascular region about the rectum.

Concerning benign ulceration of the rectum: It seems to me that it is a very common idea among the profession that we have an ulceration of mucous membrane; for instance, an ulcer in the nose, in the throat, on the tonsils or on the palate, or in fact any other mucous membrane. If we stop and think a moment, we can come to but one conclusion, that when we see an ulceration of any mucous membrane, it is either malignant, tuberculous or specific. What Dr. Mathews has said in regard to ulceration of the rectum holds good in regard to all mucous membrane.

Dr. W. O. Roberts: I regret that I did not hear all of Dr. Mathews' paper. In reference to the treatment of fistula in ano, and especially as regards the internal opening—while I do not think it is necessary at all to defer the operation until an internal opening can be found, I do think it is very important in the operation, if it is found, to open it thoroughly. An internal opening can be very much more easily found under chloroform when the sphincter muscle is divulsed, than it can be without chloroform and without division of the sphincter; but if I could not find it, of course I would not hesitate to slit up the fistulous tract as far as it could be traced. When I do not find an internal opening, I must say that I always feel uneasy about the healing of the fistula.

Concerning the ulcer of the rectum, spoken of by Dr. Mathews: It seems to me in a tuberculous ulcer of the size indicated, which had existed as long as claimed in this case, there would have been some deposit elsewhere, and I would rather be inclined to doubt that this was a tuberculous ulceration. It may be that this ulceration was increased and kept up by the treatment which the patient received prior to the time Dr. Mathews saw it.

As regards fissure of the rectum: I agree perfectly with Dr. Mathews that all fissures should be treated by division, because it is a very simple operation, and one which hardly ever fails to cure the patient in a very few days. At the same time, I know that bad fissures can be cured without operation. I recollect several cases where I have gotten most excellent results by the use of an ointment suggested by Allingham, which is composed of eight grains each of morphine and ext. belladonna, and six-

teen grains calomel, to an ounce of ung. sambuci. We find that doctors often prescribe ointments to be used in the rectum, and direct patients to put some on the finger and introduce it into the rectum. I claim that it is impossible; with a healthy condition of the sphincter muscle, ointment on the finger cannot be pushed into the rectum, consequently failure to relieve a case of fissure by this means is often due to the fact that the ointment does not come in contact with the fissure. The only way the ointment can be perfectly applied beyond the sphincter muscle is through what is called an ointment depositor. But I would not advise this method of treatment, excepting in cases where patients will not submit to treatment by division; and in making division I think it is very important that it be done carefully, not violently, so as not to rupture the sphincter or any part of the mucous membrane.

As to fissure in the child: I was a little surprised to hear Dr. Mathews say he advised the mother to use her finger every day, or every other day, as the case may be, to practice dilatation. I do not see any reason why the child should not be treated exactly the same as grown people.

Dr. Mathews' remarks concerning official surgery recall to mind the fact that I have under treatment now two cases of stricture in the lower end of the rectum, resulting from removal of what some call the "pile bearing track." Both of these cases were treated by a so-called "specialist." One of them applied to the specialist for something to correct a condition of his urine; he said his urine was very red. He had gone to a neighboring city and while there consulted a practitioner, who, after a careful examination, told him his whole trouble was due to "pockets" in the rectum. This doctor evidently removed the lower end of the bowel, resulting in an anal stricture, which was so tight that I could not get my finger through it. The other case was a lady who had some trouble, the nature of which I do not know exactly, but understand it was connected with the cervix. She said she was operated upon in about the same manner, with the same result.

I agree perfectly with what both Dr. Mathews and Dr. Rodman have said in connection with removal of the entire rectum.

Dr. Wm. Bailey (visiting): Earlier in my practice I gave chloroform very frequently for surgeons, and there is no surgical procedure which needs such complete narcosis as division of the sphincter muscle. It is very seldom that I have felt safe in producing narcosis sufficiently profound that division might be made without apparent suffering. I do not mean to say that the patient did suffer, because I was certain operation was not commenced so long as there was any movement, nor was there any recollection on the part of the patient afterward, but at the time suffering seemed to be intense.

In regard to fissure of the rectum: I fail to see how any possible good can be accomplished by such partial expansion or dilatation as Dr. Mathews refers to. The introduction of his hand is allowed by taking off the possibility of contraction by such dilatation, the parts for the time being paralyzed. I do not see how the simple introduction of a small speculum or the finger can produce any permanent results, because fecal matter even passes larger than this, and if good can be accomplished by introduction of the finger, why does not long-continued constipation bring about the same result? If a fissure needs dilatation at all, it ought to be such division as would give us complete paralysis, which would certainly accomplish very much more.

Dr. J. M. Mathews: Dr. Barbour, in his remarks, asked the question whether I had often met with tuberculosis of the rectum as a primary lesion, or whether it is most frequently secondary. In my experience the cases predominate to a great degree where the lesion is primary. I saw a case this afternoon in consultation with one of our physicians who is an able diagnostician, and who tells me that the patient has no lung deposit, but it is a clear case of tuberculosis of the rectum. My record book will show many cases of this kind. It would also show cases where from this tuberculous condition of the rectum other lesions have taken place, where the lungs

and other tissues of the body have become involved secondarily. Therefore I have tried to be explicit in saying that I believe the only remedy is a free curettement of these ulcers, to prevent secondary deposit somewhere else. I am satisfied I have prevented many patients going on and having general tuberculosis by curetting the rectum. In Dr. Barbour's special case which he reported, I would be inclined to think, from the amount of pus he mentions as having escaped, that it was not from ulceration at all, but must have been from an abscess in connection with the tuberculous condition.

Dr. Rodman mentioned in regard to hemorrhoids, that he thought the English surgeons took the position that external piles should be excised. I know of no English authority who recommends such treatment. The almost universal custom, both in this country and in Europe, is simply to make an incision and turn out the clot as I have stated—the lancing process. The doctor also says he cannot exactly understand why I say the capillary variety is the most dangerous pile. If he will think for a moment of the pathology involved in the formation of an internal hemorrhoid, he will understand that it is formed by a plastic deposit, and by friction of the mucous membrane the membrane becomes very thick, and the deposit is sufficient to stop all bleeding. Where a capillary pile exists, we have not this protection, and excessive bleeding may occur. It is an arterial hemorrhage, and is dangerous. In one of the cases reported, as I remarked, the patient lost over a gallon of blood from an artery involved in a capillary pile. An ulcerated pile can bleed but little, from the fact that the plastic deposit at the bottom of the ulcer is sufficient to prevent much hemorrhage. I have never seen hemorrhage amount to anything from ulceration of a well-formed hemorrhoidal tumor in the rectum.

The doctor refers to the special method which I employ in ligating piles. There are a number of convenient plans. Dr. Outerbridge has devised a new operation in which he practically excises the pile, brings the mucous membrane together and stitches it. It is a tedious operation, and to my mind accomplishes very little. After the ligature has cut through it leaves a very small base, which may heal in a space of ten days. My method is to take no notice of the so-called "white line," or the line of division between the mucous membrane and the true skin. An expert operator could likely dissect a pile in this manner, but in the hands of operators not so skilled an artery might be severed, and alarming hemorrhage result. This has been done, and several deaths have been reported from such an accident. In lieu of that operation I draw the hemorrhoid well down with the forceps, including all superfluous skin, cut in the true skin to sufficient depth, then throw a ligature around the pile and cut it off.

I am glad that Dr. Frank reports several cases of rectal fissure in children. One gentleman, in investigating this subject, sent out letters of inquiry to the different surgeons of the United States, and only three men replied that they had seen cases of fissure occurring in the child. I have seen many of them.

Referring to Dr. Evans' remarks in regard to the use of cocaine: The class of cases in which he would use it, about the nose and throat, would be comparatively free from danger, in contrast to its use about the rectum. The rectum, with its abundant lymphatics and blood vessels, very quickly absorbs the cocaine, and deaths have been reported from the injection of cocaine in the tissues about the rectum for operations upon piles. Dr. Evans also calls to mind that ulcers very seldom occur in the mucous membranes. All the benign ulcers that I have seen about the rectum, with the exception of a very few, in my practice, have undoubtedly been produced by contraction of the sphincter muscles, or traumatism about the anus. In the rectum proper it is very seldom that we find ulcers.

Dr. Roberts speaks of the necessity of finding the internal opening of a rectal fistula. It would be necessary to lay open a fistulous tract as far as the internal opening, there can be no doubt about that; but if the doctor will remember that in making the first incision for fistula we go down into the gut if it extends that far, and then divide the tissues. It matters not whether

there is an internal opening, you have already gone entirely through the tissues to the mucous membrane, and if you fail to detect the internal opening, certainly the plastic exudation will be sufficient to close it if one exists, but I have seldom failed to find the internal opening if one exists, and I have never in my experience had a patient return to me because of this internal opening not being closed.

Dr. Roberts also speaks of fissure of the rectum, and believes many such cases can be cured by treatment rather than dilatation. There can be no question about that, but the patient is made to suffer for weeks, perhaps months, because of this fissure and the local treatment, when by a simple surgical procedure he can be cured almost instantly. He also says that fissure in the child should be subjected to the same treatment as in the adult. The sphincter muscle of the child is very slightly formed; it requires only a mild effort to dilate a child's rectum, and the muscular fibers are such that they easily yield to the slightest dilatation. Children, as a rule, do not have well-formed fissure; it may only be a crack in the mucous membrane. In my last case four efforts of the mother, by introducing her finger into the child's rectum and practicing gentle massage, entirely cured the fissure. I do not think it necessary to chloroform a child, for the manipulation is not painful.

Concerning the remarks of my friend, Dr. Bailey: It is not necessary to paralyze the sphincter muscle of the child at all. My preference is to use a small-sized speculum, although the finger will perhaps do as well, and make a slight dilatation without chloroform.

FRENCH MEDICAL SOCIETIES.

THERAPEUTIC SOCIETY.

Ichthyol.—Dr. Maylander, of Fiume, reports the use of ichthyol in gonorrhœal epididymitis. He recalls the fact that Unna was the first to recommend sulfo-ichthyolate of ammonia, from which, in numerous and various cases, he obtained always favorable results. Subsequently this remedy was employed with often brilliant results, in certain dermatoses, in inflammatory affections of the uterus and its annexæ, in erysipelas, rheumatism, etc. He also experimented with ichthyol in the syphilitic service at the hospital of Fiume, and following are the results obtained in blennorrhagic epididymitis: With this remedy the pain disappeared, also the swelling; and after four or five days the patients resumed their usual occupations. The blennorrhœa did not assume any special complication from the treatment. Dr. Maylander cited many interesting observations, and expressed the wish that these first successes would occasion a series of experiments on a more extensive scale. The following is his formula:

Sulfo-ichthyolate of ammonia. 10 grammes.
Glycerine..... 90 grammes.
External use.

Internal Treatment of Pulmonary Tuberculosis with Ichthyol.—Scarpa eulogized this very active remedy in the highest terms. Unna was the first to adopt it in dermatology, afterwards in gynecology, and later still, internally. Its success was more or less marked in different acute affections, such as typhus, cholera, diphtheria, angina, articular and muscular rheumatism; in chronic diseases, pulmonary tuberculosis, bronchial and gastro-intestinal catarrh, neuralgia, etc. Nussbaum does not claim it to be a panacea, but as an useful auxiliary in those diseases in which hyperæmia and vaso-dilatation exist. Nevertheless, the trials of ichthyol as an internal remedy have not been made upon a large scale, but in Italy inhalations of ichthyol in chronic bronchitis, in grip and coryza, have given encouraging results, and according to Scarpa, it is an antiseptic remedy, very active in acute and chronic affections of the digestive organs. Moreover, it is an aliment that favors nutrition, and provokes the formation of organic albumin, arresting its decomposition. Ichthyol is well tolerated, even in as large doses as 5 to 8 grammes daily (Nussbaum). After its prolonged use, there is an increase in the weight of the body (Zuelzer, Cranstoom), and in the

urine augmentation of the coloring matter, of sulphur oxide, diminution of previously formed sulphates, fixed elements, and azote. These different properties of great toleration, of remarkable action upon the nutritive exchanges, the antiseptic and vaso-constrictive qualities, legitimate the hypothesis of the favorable action of this remedy in tuberculous ulcerations, and tended to verify Scarpa's researches in 150 cases of pulmonary bacilli, both in private practice and in the general polyclinic at Turin. The remedy employed was the sulfo-ichthyolate of ammonia, which salt is more readily tolerated and more efficacious than the sulfo-ichthyolates of potassa and soda. The pharmacological preparation adopted was not in the form of capsules or pills, which often provoke irritation of the gastric mucous membrane and other digestive troubles, but a solution of ichthyol, one-third, in some vehicle, say, water, glycerine, rectified alcohol, essence of mint. This last liquid has the advantage of masking the disagreeable odor of the remedy; stronger solutions are badly borne, and the repugnance due to the odor, rather than the taste, completely ceases after a week. Begin with 20 drops daily, increase 10 every second or third day, according to the toleration of the patient, finally reaching 180 or 200 drops daily. The solution adopted by Cohn was 120 drops of a solution of 50 per cent. With the exception of a tonic regimen, with or without cod liver oil, with careful hygiene, patient being allowed to be in the fresh air, window open at night, disinfection of expectoration, no constriction of the abdomen, no remedy has given results equal to those of ichthyol. Of course, and that goes without saying, in case of special accidents, such as fever, sweat, digestive troubles, pain, etc., the old established symptomatic medication should be observed. Of the 150 cases above mentioned, 110 belonged to the infiltrated form, 40 to the destructive and cavernous form. Following are the results as observed: During the early days of the treatment, say from the fifth to the twelfth day, the expectoration was modified, became more fluid, whiter, less abundant and less purulent, with absence of the fetid odor, and nummular appearance, with decrease of dyspnoea. The third week, complete disappearance of fever and night sweats. At this period, the patient took from 60 to 80 drops of solution daily, or 20 to 30 of pure ichthyol. Then ensued a general amelioration, with increase of appetite and strength, with progress of the subjective, nutritive and apparent condition of the patient. Cure was obtained in seventeen cases, and for a long time after the treatment there was neither cough, catarrh, nor troubles of any kind whatever. In fifty-seven cases the expectoration was examined microscopically, before, during and after the treatment. In thirteen there was a complete disappearance of the bacilli, and in the others a notable diminution. Scarpa's conclusion from these observations is, that ichthyol is a remarkable and powerful agent in pulmonary tuberculosis, superior to gaiacol, and deserves to be tried freely and fully.

Photography of the Invisible and Its Applications to Surgical Diagnosis.—France: Prof. Lannelougue experimented in the hospital service of the "Hospice Trousseau" with the results obtained by Prof. Roentgen, and with the hope of confirming their application to surgery, and determining what was to be expected from this wonderful discovery. The distinguished savant presented, in his own name and those of MM. Oudin and Barthelemy, and for the examination by his colleagues in the institute, a series of photographs of several human members, which he had obtained for this purpose. The first represented a femur affected with osteomyelitis. M. Lannelougue remarked that this proof confirmed what he had previously demonstrated. That is to say, that in this affection, the destruction of the bone began from the center to the periphery, and did not proceed from the periosteum to the center, as has been heretofore believed. The central portions, destroyed and converted into caverns, were traversed by the light, and formed white spots, as seen on the proof. The second photograph was that of a tuberculous affection of the finger of a child. A clinical diagnosis had been made, and the photographic proof confirmed it experimentally. The first phalanx was larger and thicker than that of the other fingers, and the thickening and infiltra-

tion of the periosteum by fungosities of peri-osseous tissue were clearly seen, the articulation, larger than others, was but slightly affected. Finally, the second phalanx was more transparent than all the others of the same hand, and had become the seat of an osteitis just beginning. The third proof was not so good, perhaps because the tissues which were photographed had been macerated in alcohol for many years. In effect it was a photograph of an anatomical specimen taken from the museum of the Trousseau Hospital, one hand affected with tubercular osteitis of the carpus, and a white spot, which corresponded to the part affected, was distinguished exactly. M. Lannelougue concluded that these results, though defective, justified a favorable appreciation of this method as respects its application to surgery. At Montpellier Prof. Imbert made different, but conclusive experiments at the Institute of Physics and Chemistry. Austria: At Vienna, Dr. Mosetig has just made the first trials of the practical application of Roentgen's discovery to surgery, and with full success. Having to perform two operations, he previously took a photograph of the parts involved, according to Roentgen's method. In the first case, the image revealed to him, with absolute precision, the course and position of a ball from a revolver in the hand that had been wounded. In the second case, that of a young girl affected with a malformation of the foot, he was informed exactly as to the seat and extent of the injury, and with a perfect knowledge of the cause, he proceeded to operate. M. Spiess also photographed at Vienna the hand of a worker in glass, containing a portion of glass for many years. The photograph revealed the exact locality of the foreign body. Germany: At Berlin, M. Neuhaus exhibited to a scientific body photographs taken by the Roentgen rays. They were rather photographic silhouettes. He said this phenomenon is interesting to physicians, because there are bones and metals, like lead, which are with difficulty permeable by these rays. Experiments made by Prof. Slaby, in presence of Emperor William at the Polytechnic School of Charlottenburg of Roentgen's discovery, succeeded perfectly, thanks to a perfected apparatus that had been put at his disposition. Photographs of the skeletons of chickens and mice were made with astonishing distinctness.

BIOLOGICAL SOCIETY.

M. Monier addressed a note upon the hemorrhagic secretions of different microbes, and his conclusions are analogous to those of M. Charrin upon the pyocyanic microbe. In effect, he proves that by the alteration of the blood which different microbes cause, they are veritable hemophilic agents.

M. Méry reported two cases of infection produced by subcutaneous injections of caféine. In one of the cases the abscess contained pneumococci, and in the other, streptococci. The last patient was affected with scarlatina, and M. Méry thought that the infection of the walls of the cavity determined by the infection was reproduced by the blood.

MM. Roger, Gilbert and Cadiot continued their researches upon the tuberculosis of birds as compared with the human. They concluded that the two forms of tuberculosis are only two varieties of the same kind.

M. H. Claude reported two experimental observations of hemorrhage of the biliary vesicle. The first case was that of a rabbit slowly poisoned by pyocyanic toxine; the second, a guinea pig, received the virus of tetanus. The biliary vesicle presented effusions and slight ulcerations of the mucous membrane, with hemorrhages and formation of clots, in which different microbes appeared in the ductus choledochus. M. Claude thinks that a similar process occurs in man in the course of infectious diseases.

M. D'Arsonval showed that electric currents of high frequency exercised a very appreciable attenuating action upon the virulence of microbic toxins. In a new series of researches it was proved that the same currents did not appear to act on the microbes themselves.

M. Chretien has studied the action of the contents of tuberculous caverns when filtered and injected into the ear of a rabbit. A sensible thermic elevation is the result, and he thinks that the hectic fever of

consumptives may be explained by the absorption of the products of the caverns. M. Hallion and M. Franck investigated in the laboratory of the latter professor, the influence of the sympathetic nervous system upon the intestine. On measuring the differences of volume of the intestine by means of a special method, and then irritating the sympathetic chain, it was found that the vaso-constrictor nerve-fillets began about the fifth dorsal nerve, and the vaso-dilators about the eleventh dorsal. The union of these fillets constitute the splanchnic nerve. MM. Dejerius and Thomas found in subjects affected with descending degeneracy of the medulla, that the direct pyramidal bundles descend to the upper part of the fourth sacral vertebra, and the direct to the "filum terminale." M. Imbert, of Montpellier, exhibited photographs taken by the Roentgen method, and obtained after a few seconds' application. Especially successful was the finding and locating a needle in the hand of a young girl.

ACADEMY OF MEDICINE.

Pulmonary Vaso-Constrictive Action of the Great Sympathetic.—M. Francois Franck has succeeded in demonstrating, by a series of experiments, the pulmonary vaso-constrictive action of the great sympathetic. Reflex spasm of the pulmonary vessels constitutes the principal condition of acute dilatation of the right heart, in painful affections of the abdomen. But it is necessary that the cardio-inhibitory nervous influences should be brought into play simultaneously. These diminish the resistance of the myocardia, which permits distension. Nasal irritations also provoke spasm, and so we are enabled to understand their influence in asthma.

Preventive and Immunizing Action of Drugs.—M. Laborde shows that this action may be compared, as in the case of the sulphate of quinine, for example, and the preventive action of the antitoxines. By the employment of a bromide the development of an epilepsy, which is easily realized experimentally in the guinea pig, can be prevented by a section of the sciatic nerve. Curare, which is a good immunizing agent against strychnine, would perhaps have an analogous efficacy against the toxine of tetanus.

Inhalations of Formol.—M. Lancereaux presented an apparatus of M. Hamel, for the inhalation of formol in tuberculosis, in bronchial dilatation and pulmonary gangrene. The inhalation diminishes cough, and the abundance and fetor of the expectoration.

Tuberculous Contagion in Hospitals: Renewal of the Discussion.—M. Jaccoud considered this contagion not from a practical point of view, but from one rigorously scientific. The statistics, demonstrative as they seem to be, and bearing upon hospital personality, and not upon patients, do not give a rigorously experimental demonstration. In effect, it is always possible that contagion may be effected outside of the hospital, before entering it, or after leaving it. Again, 40 per cent. of subjects dead from disease other than tuberculosis, exhibit, upon autopsy, Koch's bacilli in the mediastinal ganglia, demonstrable by the inoculation of the guinea pig. The clinique sometimes shows a reawakening of latent tubercle, and M. Jaccoud cited an observation of a thoracic wound which had determined a localized tuberculosis of the pleura, without any recognizable lesion of the lung or other viscera. Koch's bacillus may exist in a latent state in the organism of a patient before entering the hospital, and so the hospital origin of the tuberculosis always remains impossible to demonstrate scientifically.

This most important and interesting discussion will be continued.

MEDICAL SOCIETY OF THE HOSPITALS.

M. Chaput reported a case of gastric ulcer with a large tumor. Gastro-enterostomy was practiced, the patient rapidly cured, and no more vomiting. The tumor continued to be indolent, the stomach dilated, patient digests solid food, and has gained flesh. Considering the age of the patient, and her long survival—eighteen months—the diagnosis of cancer is inadmissible. M. Chaput then presented specimens taken from a patient operated upon by

M. Iathieu for a muscular contraction of the pylorus. The operation was performed with the button of the operator; sutures perfect, but the patient succumbed to shock.

MM. Roger and Josue, in order to elucidate the pathogenesis of appendicitis, practiced ligation of the appendix, after having injected a few drops of a virulent culture of the bacillus coli. The animal died in fifteen days, and the autopsy revealed suppurative appendicitis with peri-appendicitis. By practicing ligation only, and destroying the animal three months after, the part of the appendix isolated by the ligature is seen to be transformed into a cystic pocket, not communicating with the rest of the intestine, and containing a thick pus in which the bacillus coli was found in a state of purity. We may then conclude that a slight and aseptic obstruction of the appendix is sufficient to produce suppurative inflammation, by transforming an inoffensive intestinal microbe into a pathogenic agent.

M. Rendu: Similar clinical facts exist. In a phthisical patient he found the appendix closed and filled with pus. The preceding experiments show very clearly the pathogenesis of certain varieties of appendicitis.

MM. Sevestre and Mery: Many observations can be made upon the subject of the sero-therapy of diphtheria. First: the serum may develop in some cases an active eruption of urticaria. Second: In rarer cases, it may be followed by accidents, more or less grave, characterized by a polymorphous eruption, by arthropathy, and a general condition of disquietude. Subsequent accidents occur about the thirteenth or fifteenth day, last from one to four days, and terminate ordinarily by cure. These are never seen in cases of pure diphtheria, and are in relation with the infection by the streptococcus. The employment of the serum does not produce any accidents in the pure diphtheria; hesitation for its employment is admissible when the streptococcus is associated with the bacillus of Loeffler; it is useless in streptococcic angina.

M. Netter: The same accidents are observed with other therapeutic serums, an example of which was seen in the anti-pneumococcic serum of Mosny, and one with the serum of Maragliano.

M. Chantemesse proposed to substitute sero-therapy by the digestive passages for the subcutaneous injections. In twenty observations this mode of administration did not alter the action of the serums in the least degree.

M. Legendre cited a case of staphylococcic angina, with Loeffler's bacillus, in which the serum of Roux produced accidents which, for a time, threatened the life of the patient.

M. Gaucher observed identical accidents in a case of slight diphtheria.

M. Chantemesse thought that in this case it was the staphylococcus that caused the trouble.

M. Dieulafoy declared in his lectures before the Faculty, that he had clearly established the facts, both anatomically and bacteriologically, as respects appendicitis in man, that were confirmatory of the experiments of MM. Roger and Josue. Appendicitis is always the result of the transformation of the appendicular canal into a close cavity, whether due to its obliteration by the slow formation of a calculus, of a local infection or to a fibrous contraction, similar to that of the canal of the urethra. Many of these causes may be found united in the same subject. The symptoms of appendicitis, whether mild or grave, manifest themselves only when the transformation occurs, and at that moment the microbes of appendicitis, hitherto harmless, multiply and increase their virulence. The agents of infection, often grave in character, are the bacillus coli and the streptococcus. The patient may succumb from the appendicitis alone, or complicated with acute septicemia of the peritoneum without perforation, or from gangrene, followed by perforation with all its consequences.

M. Hutinel did not deny that the accidents which supervened from the injections of the serum of Roux, were due to streptococcic infection, but he remarked that neither the direct examinations of the mucus of the throat, nor the analysis of the blood, nor the autopsies, had established the fact. The gravity of the post-sero-therapeutic accidents, from which children are seen to die, cannot be

doubted. One has pharyngeal diphtheria, with streptococcic association, another diphtheria consecutive upon scarlatina. Both received Roux's serum, and subsequently presented albuminuria, anemia, etc. M. Chantemesse thought that the serum protected the kidney rather than injured it. It is an error to pretend that the streptococcus is not found in the blood; he has proved its presence in numbers of instances. M. Sevestre cited a new fact in support of the theory sustained by him. A child, after suffering very acute lumbar pains, was taken with streptococcic angina; the serum was *not* injected. Some days afterwards he had articular pains, with an eruption over the principal joints. If he had received the injection the eruption would have been attributed to streptococci; there was no albuminuria. M. Legendre attended a child affected with diphtheria, that showed albumen in the urine on the fourth day after the injection of serum. This does not accord with the role of protection proclaimed by M. Chantemesse. M. Hirtz knew of two children that had never had albuminuria before the injection of serum, but were attacked a few hours after. If this is not the relation of cause and effect, the coincidence is, to say the least, very odd. M. Chantemesse: When albuminuria supervenes, it should be attributed to a secondary infection. M. Variot has had the care of 1,414 diphtheritic patients, so recognized from bacteriological examination at the Bretonneau pavilion. He lost 205—14.5 per cent. According to him, the accidents produced by the serum, were due, on the one hand, to a reduplication of albuminoid principles in the blood, and on the other, to an alteration in these last, which was prevented only by the employment of freshly prepared serum.

M. Chantemesse inquired of M. Variot if he had observed albuminuria in patients treated by serotherapy.

M. Variot did not believe that albuminuria was directly to be imputed to the serum, and he was able to determine, in a great number of cases, a diminution in the urine emitted. Albuminuria was only observed in very grave or toxic forms. M. Catrin believed that the serum was altered by age, and demanded that in France, as in America, the date of the fabrication of the serum should be indicated upon the bottle.

SOCIETY OF LEGAL MEDICINE.

M. Vallon related a case of cerebral traumatism, followed by cerebral troubles, dipsomania, etc. An officer, with no hereditary vice, and whose life had previously been honest and laborious, fell from his horse and seriously injured his head. For many days he continued in an unconscious condition; then left the hospital, and for three months suffered no inconvenience, with the exception of occasional noises in his ears. One day he fell in a faint, and a violent crisis ensued. Dating from that moment, he became erotic, a gambler and dipsomaniac with suicidal tendencies. This conduct was such as made punishment necessary, and he was obliged to quit the army. After some years he came to Paris and was attacked on the public street by a fit of mild delirium. The traumatism was manifestly the cause of the cerebral troubles. M. Garnier has observed several cases analogous to that of M. Vallon, the officer who, after his fall underwent the impulsive changes; became cerebralized, so to speak. There are hereditary degeneracies; this one was an acquired degeneracy, an auto-degeneracy. Such patients have no pathological heredity, but inherit of themselves. M. Vallon: It may be said in addition, that among many whose crania have been trepanned or wounded, they have become erotic. M. Vibert: A distinction may be made between intellectual and moral traumatism. In the adult, and especially in the old, the moral sense is less frequently affected by traumatism than in the child, whose development is yet to come. I have observed three traumatic neuroses in children, and in all three cases the moral sense was affected, and not the intellectual functions. M. Charpentier agreed with M. Garnier. He had seen two traumatics, who, while exempt from every hereditary vice, had become cerebralized. One of them became a general paralytic, the other continued mentally imbecile.

Treatment of Morphino-Mania by the Rapid Method.—M. Laborde presented a work by M. Sollier, demonstrating the advantages of rapid suppression; more scientific and shorter than the slow method, less dangerous and less painful than sudden suppression. No means of corporal restraint is necessary. But during the acute period of demorphinization the patient should be in a special establishment, and under the constant supervision of a physician. The duration of the treatment should be at least sixty days. Relapses are less to be feared with the rapid than with the slow method.

Application of Roentgen Rays to Surgical Diagnosis.—MM. Lanuelongue and Oudin have continued their researches by this method. In two subjects, one cured of an osteo-arthritis of the left knee, had previously undergone several operations. The other, a child of eight years, cured of an osteitis of the femoral diaphysis. Photographs of the regions, which accurately showed the condition of the bones and the articulations, were taken. In the present case, the photographs confirmed the indications as given by the clinic, but in other cases, it may readily be seen, they could rectify them.

Microbic Associations and Tuberculous Suppurations.—MM. Lanuelongue and Achard have investigated, with the view to determine it, in tuberculous abscess, the suppurative is the work of the bacillus of Koch alone, or of pyogenic micrococci associated with that bacillus. They have distinguished open and closed purulent deposits, and among them those which were evolved with all the phenomena of acute activity. The results obtained were as follows: The association of the pyogenic microbes with the tubercular bacillus is always the rule in the open deposits—five times in five. This has been the exception in the closed collection—six times in fifty-seven—and always coincided with acute phenomena. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Ergot in the Treatment of Uterine Fibroids.—(Abstract of a paper by Dr. Franklin H. Martin, in the *Journal of the American Medical Association*, March 21, 1896). The physiological actions of ergot are accounted for by its effects upon unstriated muscular fiber. It contracts blood vessels everywhere, thereby increasing the blood tension. The uterus, formed as it is by an enormous proportion of smooth muscular structure, is particularly susceptible to the peculiar action of ergot. It acts upon the uterus in four ways:

1. It decreases the whole bulk of the organ by producing a steady tonic contraction of all its muscular fibers.
2. It decreases the whole bulk of the organ by decreasing the amount of blood in its walls, as a result of contracting its blood vessels.
3. By decreasing the amount of blood in the uterus, it modifies materially its nutrition and decreases the amount of the menstrual flow of blood.
4. When given in large doses it not only produces tonic contractions of the muscular fibers of the uterus, but by instituting clonic contraction of its fibers, expulsion of natural and foreign bodies from its walls and cavity is effected.

Upon these thoroughly demonstrated effects of ergot has grown up a rational and very successful medical treatment of fibroids of the uterus.

Indications: The most favorable case for ergotin treatment in which a complete cure may be looked for is the intramural variety, which consists of one or few centers of development, with these centers situated in close proximity to the mucous membrane. The uterus in such a case is considerably enlarged, the canal is long and tortuous, the symptom of uterine hemorrhage is conspicuous, and the normal muscular tissue of the uterus is hypertrophied. Ergot given in such a case in large doses, contin-

ued for some weeks, will cause the hypertrophied muscles of the uterus to contract and to gradually squeeze the fibromatous center first toward the mucous membrane, then beneath the mucous membrane, and finally into the uterine cavity, where the uterine expulsive pains will effect its deliverance. The enucleation of such a tumor can be materially assisted, as it should be, by incising its capsule as it begins to protrude beneath the mucous membrane.

When such a center or centers are expelled effectually the uterine pains will cease, the hemorrhage will lessen, and the uterus will soon be found of normal size.

Pedunculated fibroids are somewhat differently affected by ergot when they are sub-mucous than when they are sub-peritoneal. While in the latter case a gradual atrophy of the stranded mass may take place, this is much more likely to occur if the tumor is sub-mucous.

A *true interstitial fibroid* is seldom cured by ergot.

Prof. W. H. Byford begins a chapter on the subject as follows: "(1) When properly administered, ergot frequently greatly ameliorates some of the troublesome and even dangerous symptoms of fibrous tumors of the uterus, *e.g.*, hemorrhage and copious leucorrhœa. (2) It often arrests their growth and checks hemorrhage. (3) In many instances it causes the absorption of the tumor, occasionally without giving the patient any inconvenience. At other times removal of the tumor by absorption is attended by painful contractions and tenderness of the uterus. (4) By inducing uterine contraction it causes the expulsion of the polypoid variety. (5) In the same way it causes the disruption and discharge of the sub-mucous tumor."

Method of administration: According as the physician seeks a mild or an active effect of ergot should he regulate his dose. In the first case ergot is administered in doses just sufficiently large to maintain a tonic contraction of the arterioles and of the uterine tissue, without producing the pain which is a constant accompaniment of the violent clonic contractions of the uterus. When the active effects of ergot are sought, large and often repeated doses are administered in such a manner as to obtain prompt and full physiologic effects of the drug.

When mild effects are sought ergot can usually be administered by the stomach. For this purpose I usually employ the purified extract called ergotin, administered in the form of capsules. Capsules containing from 3 to 5 grains each, given at intervals of four to six hours, will seldom disagree with the patient. Ergot can be given with good results in mild doses in rectal suppositories.

Ergotin in capsules, in 5 and 10-grain doses, frequently will be tolerated by the stomach almost indefinitely. Occasionally a much smaller dose will be utterly rejected. Ergotin may then be administered in 8 to 10 or 15-grain rectal suppositories. Decided physiologic effects may frequently be obtained in this manner. The lower bowel should be kept clear of all fecal matter and the suppository placed high. They may be administered as often as every six hours. Suppository tubes may be employed to advantage for the purpose of placing the suppository mixture higher in the bowel than is possible with the ordinary suppository. Small rectal enemas of the fluid extract may be employed as a means of obtaining the active effects of the drug.

Hypodermic injections of fluid preparations of ergot succeed in obtaining the promptest and most efficient physiologic effects of the drug. Abscesses may be avoided by attention to aseptic principles, and the pain may be materially avoided by selecting non-sensitive portions of the skin, combined with deep injections, and by the employment of a mixture containing one of the less harmful sedatives, as chloral hydrate or belladonna.

According to W. H. Byford, most American practitioners now use Dr. Squibb's purified solid extract of ergot, prepared as follows: Dissolve 200 grains of the extract in 250 minims of water, by stirring; filter the solution through paper, and make up to 300 minims by washing the residue on the filter with a little water. Each minim of this solution represents 6 grains of ergot in powder. Of this solution from 10 to 20 minims are injected once daily or once in two days.

Duration of treatment: As ergot, at best, can scarcely be termed an actual curative agent for fibroid of the uterus (except in rare instances), it follows that the duration of treatment must vary with the physiologic effects of the drug, under different doses, the variety and character of the tumor, and the results sought, as estimated by the judgment of the practitioner treating the case.

If the case is merely an ordinary bleeding interstitial fibroid of uniform contour, small doses of from 2 to 5 grains each of ergotin in capsules might be given three times a day for several months. If it is a sub-mucous fibroid in which the attempt is to be made to accomplish the expulsion of the mass, ergotin in form of large suppositories, or better, in hypodermic injections, will be administered until the result is obtained. When the tumor is expelled the remedy is immediately suspended. If the case is one of interstitial bleeding fibroid, ergot in good full doses, either by capsules, suppository, or hypodermic injections, should be commenced a few days before the menstrual period, and be continued until the flow has ceased, when it can be discontinued until a week before the next menstruation.

Results: The results obtained in the treatment of fibroid tumors of the uterus by ergot depend much upon the sincerity and persistency of the physician who is conducting the treatment. If he is sincerely desirous of exhausting the resources of ergot in these cases before resorting to more radical means, or better, if he is opposed to any more radical treatment than the ergot treatment for fibroids, combined, of course, with rational hygienic and general tonic treatment, he will be sure to benefit a large percentage of his cases, and possibly a small percentage will become actually cured.

Prof. W. H. Byford reports in his "Diseases of Women" 101 cases, including 27 of Hilderbrandt's, 9 of his own, 14 of White's, of Buffalo, and the remainder from a score of physicians. He summarizes them as follows:

"The total number of cases here cited is 101. Twenty-two of them are reported cured. In 39 more the tumors were diminished in size, and the hemorrhage and other disagreeable symptoms removed. Nineteen of the remainder were benefited by the relief of the hemorrhages and leucorrhœal discharges, while the size and other conditions of the tumors were unchanged. Out of the whole number only 21 cases entirely resisted the treatment. This shows results decidedly favorable in 80 of the 101 cases."

Hiccough Cured by Putting Out the Tongue.—A female patient presented herself at the Hotel Dieu, of Lyons, for a rebellious hiccough which had resisted all treatment for four days. She was asked to show the tongue, and it was noticed that with the putting out of the tongue the hiccough ceased. The same thing has since been tried, and with success, in other cases. All that is necessary, apparently, is to strongly push the tongue out of the mouth and hold it so for a minute or two. It is also suggested now to try the same thing in suffocative cough, as whooping cough and choking by irrespirable gases.

Eucalyptus for Chilblains.—It is said (*Drug. Circ.*) that oil of eucalyptus, frequently applied with a camel's hair pencil over the surface of chilblains, relieves pain and soon cures them.

The Properties of Goose Grease.—Langford Symes writes as follows in the *Dublin Journal of Medical Science* concerning the valuable medicinal properties of "plain goose grease," a substance for many years well-known in most households:

In affections of the chest it is a most excellent remedy to apply even alone. In bronchitis of the sub-chronic type, or what would best be termed "a cold in the chest," or moderate bronchial catarrh, few liniments or applications will be found to equal this "oleum anseris," or goose grease. If a drachm or so be placed in the hand of the rubber, and a stimulative liniment—such as is frequently prescribed for this condition—be poured thereon, it will be carried into the tissues in a remarkable manner. This was especially observed during an epidemic of influenza, in cases where some mischief remained unresolved in the lung, and that peculiar tenacious viscid secretion lay

attached to its internal mucous or serous vesicular wall. The writer has seen goose grease remove, in a distinct way, muscular rheumatism when rubbed in. Thickening in the neighborhood of joints after sprains, or sub-acute rheumatic inflammation, will be greatly aided towards resolution by its use.

It has also been markedly beneficial in cases of wasting, or marasmus. When rubbed into the abdomens and groins of young children it is a decided nutrient, and experience will bring conviction of its efficacy. It can be eaten on bread, with salt, and in this way, if freshly prepared, is very palatable and nutritious. Active drugs incorporated with it, will, when applied externally, be under the best conditions for permeation through the skin, and it will not lie on the surface unabsorbed so much as other oils. It is liable to become rancid, but may be kept for many weeks by the simple addition of some boric acid.

For Insomnia Due to Noise.—For those whose rest is disturbed by the noises of the street, by the howling of dogs, by the crowing of cocks, the cooing of doves and the varioussounds which murder sleep in town or country, the following plan may be commended. Prof. Rosenbach, of Breslau, suggests plugs of cotton-wool steeped in vaseline, each six centimetres long, three centimetres wide, and one centimetre thick. The upper surface of the plug is smeared with vaseline, then rolled into the form of a cylinder and put into the auditory meatus to a depth of about two centimetres. The outer end is spread out in the concha, and outside this a layer of wool is applied. The plug is taken out in the morning, when the meatus must be well dried. Dry cotton-wool does not prevent the sonorous vibrations from reaching the tympanic membrane, but plugs greased in the manner just described do so effectually, though of course they do not prevent mechanical shaking.

New Device for Treating Pulmonary Affections.—A new instrument called the "Globe Nebulizer" has been devised for the treatment of the affections of the respiratory organs, and Dr. Chas. S. Turnbull, of Philadelphia, says it is one of the safest instruments in use for inflating, also medicating, the middle ear.

This device constitutes the nearest to perfection of anything we have yet seen in the direction indicated. All classes of medicinal agents, whether volatile or non-volatile, can be vaporized without the use of steam or heat, and applied, as indicated, to the respiratory tract, even to the remotest part, as conditions may require.

We are thus enabled to individualize our means in the way of drugs, and to saturate the atmosphere of the room with any agent desired.

Prof. Granger Stewart, of Edinburgh University, considered the apparatus as sufficiently important for him to devote space to it in the "Twentieth Century Practice," when referring to the treatment of bronchitis.

A great variety of formulæ are furnished, from which the physician may select, by the Globe Manufacturing Co., Battle Creek, Mich.

A Valuable Adjunct in the Treatment of Gout.—Before the true nature of the gouty diathesis was understood, the medicinal treatment consisted for the most part of the various preparations of colchicum. Although this remedy is still employed to a certain extent in this class of cases, it is no longer regarded as a specific, as formerly. When it had been satisfactorily determined that the manifold manifestations of gout were all dependent upon the presence of an excess of uric acid in the blood and other fluids of the body, a definite aim was given to the therapeutics of the disease. Remedies were now sought for which would keep the uric acid in a soluble condition, prevent its deposition in the joints and other tissues, and secure its elimination from the system by way of the urinary passages. The alkalies, especially the salts of potassium and lithium, were found to accomplish these objects, but only to a certain extent. While in some instances they effected marked improvement, in others they disturbed the digestive organs and had a general weakening influence. More recently piperazine was introduced as a uric acid solvent, and has been warmly recommended by many authors in the treatment of gouty conditions. It

was thought, however, that by uniting piperazine with an alkali the combined effect of an alkaline salt and of this powerful uric solvent might be obtained, and this aim has been realized in lycetol, which is a tartrate of dimethylpiperazine. This new remedy promises to be the most efficient anti-arthritic yet placed at the disposal of the physician. Aside from its valuable medicinal properties, it has the advantage of being exceedingly agreeable to the taste and of not disordering the functions of the digestive apparatus, even when employed for prolonged periods. When given in 15 to 25 grain doses daily, lycetol promptly produces an increased elimination of uric acid from the system, relieves the pains and other discomforts of gouty patients, and if continued for some time will, in conjunction with appropriate local measures and general hygienic regulations (diet, exercise, etc.), often cause the disappearance of uratic deposits in the joints and other structures.

Remedies in Neurasthenia.—Respecting the therapeutic value of remedies in neurasthenia, Prof. O. F. Pierce (*Med. Current*, May, 1895) concludes as follows: In looking over the remedies that seem to have the power to assist Nature in re-establishing its normal condition, we discover in gelsemium a remedy that spends its force on the motor nervous system. In phosphorus, one that works through the great vegetative system. In causticum, a remedy that acts principally upon the cerebro-spinal system, having marked influence upon the pneumogastric nerve. In hypericum, a remedy that spends its force on the cerebro-spinal system, having two special centers of action, nervous system and the joints. In belladonna, a remedy that has so wide an action that its service is usually employed in cases of this variety.

It is very clear that these agents are exceedingly valuable in the treatment of neurasthenics.

The success of our treatment is greatly influenced by the hygienic surroundings and the moral state of the patient.

Life in large cities will develop an irritable condition of the nervous system in some individuals, and unless this aggravation is removed, recovery will be almost hopeless.

The food must be carefully selected and the most nourishing diet employed, especially in the city, as surroundings are more enervating.

Piperazine As an Eliminant of Uric Acid.—Although it is still a disputed question as to what factors are concerned in the excessive formation of uric acid and its retention in the system, clinical investigations would seem to show that among all the remedies hitherto proposed for the prevention and cure of uric-acidemia, as it is now termed, piperazine deserves the chief place, both on theoretical and empirical grounds. The mistake frequently made in the use of this remedy, however, is that it is administered for too short a period to obtain positive and curative results, for it should not be expected that a brief trial of any drug shall effect an immediate and striking change in any condition of such chronic nature as the uric acid diathesis. Dr. Heerman, who published a number of cases successfully treated with piperazine, about a year ago, has recently reported that the favorable results obtained at that time have since persisted (*Therap. Monatshefte*, July, 1895). He also records several additional cases, of which three are especially noteworthy. The subject of the first, a man aged forty-four, had suffered since 1886 from attacks of renal colic, as was later shown by the passage of calculi in the urine. At the time of his first visit to the author, in 1893, he displayed an entire collection of calculi, some of which were as large as a pea. After having taken a course of the waters at Carlsbad he passed considerable gravel, and the attacks of renal colic recurred less often, but in September, 1894, had regained their former frequency. Resort was then had to piperazine with excellent results, the passage of a large quantity of fine, granular concretions and disappearance of the attacks, which have not recurred for seven months. The patient still takes the remedy for prophylactic reasons (1.0—2.0 gm. each week), and claims that its administration is always followed by an increased amount of gravel. The second patient, a man, aged fifty-two, had

suffered from gouty attacks since 1881, which recurred every year, and lasted four to six weeks. When he came under the author's observation in the summer of 1893, his hands and feet were markedly affected, and despite the external application of ichthyol and the internal use of salicylate of lithium and bicarbonate of sodium, no improvement occurred. Some relief, however, was obtained from a course of warm mineral baths, and he was enabled to follow his occupation until the spring of 1894, when he had a serious attack. Piperazine was now employed in 0.5 gm. doses daily in soda water, and after its use for eight days the attack was aborted, and similar results were obtained in March of this year. In the third case a gouty swelling of the index finger of the right hand, also disappeared in the course of six days under the administration of piperazine, and no further extension of the disease took place. These cases fully attest to the value of piperazine as an eliminant of uric acid in the various conditions in which this is the aim of therapeutic endeavor. A most useful and convenient means for administering the remedy are the tablets of piperazine—Bayer—which represent an average daily dose.

Treatment of Nocturnal Enuresis With Large Doses of Atropine.—In obstinate cases of this complaint, which have resisted ordinary modes of treatment, and in which the patient has come to the age of puberty, MacAlister (*Dublin Jour.*) considers that the secret of success lies in courageous overdosing with atropine. Having ascertained that no condition requiring surgical interference exists, he employs this drug, and gradually pushes it to the full limit of tolerance, and in no instance out of some twenty cases has he failed to effect a cure. He directed that a boy, in a case which he describes, should drink no fluid after 6 P. M.; that at 9 P. M. he should take five drops of the following mixture in a tablespoonful of water (age of boy, fourteen years):

Liquoris atropinæ sulphatis.....1-2 drachms
Liq. strychninæ hydrochlor.....45 minims
Syrupi aurantii.....Ad 1 ounce

and that he should go to bed at 10 after emptying the bladder; that he should be waked to pass water at 12, when his parents went to bed, and again at 6, when the servants rose. This dose was to be continued for three nights; then 10 drops nightly for the next three, then 15 for the next three, and so on until 30 drops were taken. This dose was taken for a week, when enuresis occurred. The dose was increased by 5 drops every three nights till 60 drops were taken. This dose was continued for a week; no enuresis occurred, and the dose was diminished by 10 drops every three nights, until, after nine weeks, the treatment was discontinued. The enuresis, which had occurred two or three times a week since early childhood, never recurred. In this case the drug caused dryness of the throat, and dilated pupils, and paralyzed accommodation, so that he became unable to write.

In this case the maximal dose given was about one-ninth grain of sulphate of atropine, but in the case of a girl of seventeen he pushed the dosage up to one-quarter grain of the sulphate of atropine nightly, with ultimate success. In no instance were the secondary effects alarming in any way, or, indeed, more than slightly inconvenient. The addition of strychnine probably diminishes the depressing effect of large doses of atropine, and increases the sensitiveness of the vesical centers to reflexes from the bladder walls.

Rapid Treatment of Morphino-Mania.—At a recent meeting of the Paris Academy of Medicine, M. Laborde discussed the results obtained by Dr. Paul Soller at Paris from the Erlenmayer or "rapid" treatment of morphinomaniacs. The statistics adduced cover three years (1892-1894), and are very favorable for the system. It is claimed for it that it does away, on the one hand, with the chance of mortal accidents and the violent pains that accompany the "sudden" method, and that, on the other hand, it is invariably successful in weaning the patient from the mania, of which one is never certain with the "slow" treatment. Relapses are reduced to a fraction of their usual number, and the whole time required for the cure and convalescence does not exceed, on the average, two

months. It seems indispensable for the success of the "rapid" method that the patient should pass a period of convalescence in a special establishment for the purpose, such as exists in Germany.

RETROSPECTIVE DIETETICS.

Artificial Foods in France.—At the Congress for the Protection of Children, sitting at Bordeaux, France, a resolution was adopted to the effect that artificial food should be forbidden in the case of infants under six months of age, that from six to twelve months of age the food should be milk with a little farinaceous material or the yolk of eggs, and that from one to two years the diet should consist of milk, eggs, mashed vegetables, tapioca and a little boiled fish. The feeding bottle with India rubber tubing was unanimously condemned.

Benefits of a Meat Diet.—In older countries (*Century*) the lower orders, as a rule, have but a low vitality. It may be truer to say that the vital volition is weak. Let the learned settle the definition. The fact is easily accounted for. During generations upon generations the majority of European agricultural populations lived upon vegetable food, like the majority of Eastern Asiatics, and with the same result. Hard labor produces hard muscles, but vegetable food yields a low vital tension, so to say. Soldiers know it well enough. The pale-faced city clerk who eats meat twice a day will outfight and outlast and outstarve the burly laborer, whose big thighs and sinews are mostly compounded of potatoes, corn and water.

Ill-Temper a Symptom of Excessive Meat Eating.—According to Mrs. Ernest Hart ("Diet in Sickness and in Health," page 57): "One deplorable result of excessive meat eating in England is the ill-temper which is a chronic moral complaint among us. In no country, I believe, is home rendered so unhappy and life made so miserable by the ill-temper of those who are obliged to live together as in England. To everybody who reads these lines examples will occur of homes which are rendered quite unnecessarily unhappy, when they might be happy, by the moroseness and rudeness of the head of the family, by the peevishness of the wife, or by the quarreling of the younger members. If we compare domestic life and manners in England with those of other countries where meat does not form such an integral article of diet, a notable improvement will be remarked. In less meat-eating France urbanity is the rule of the home; in fish and rice-eating Japan harsh words are unknown, and an exquisite politeness to one another prevails even among children who play together in the street. In Japan I never heard rude, angry words spoken by any but Englishmen. I am strongly of the opinion that the ill-temper of the English is caused in a great measure by a too abundant meat dietary, combined with a sedentary life. The half-oxidized products of albumen form urates and uric acid, which, circulating in the blood, produce both mental and moral disturbances."

Treatment of Asthma by a Strict Milk Diet.—Huchard (*Sem. Méd.*) reports a number of successes in the treatment of cases, wrongly called neuropathic or reflex asthma, by the use of a strict milk diet. He has found the same regimen of great benefit in cardiac cases with nocturnal paroxysms of dyspnoea. He considers the dyspnoea in these cases to be due to ptomaines that find their way into the sluggish circulation and poorly oxygenated blood from the alimentary canal. He has found it only necessary to interrupt the strict milk regimen and resume a mixed diet to cause the paroxysms to recur. He has found that the milk, about three litres per twenty-four hours, must not be all given during the day, but about a litre of it in the evening and one-half litre during the night. There is a question whether the same results may not be obtained by the use of intestinal antiseptics in such patients as are unable to bear the strict milk diet. Huchard seems to incline to the opinion that all nervous asthmas are of toxic origin, and due to ptomaines absorbed from the intestinal tract.

MISCELLANY.

—Count Mattei died April 7th, at Bologna.

—An ordinance is now posted in the street cars by the Board of Health, forbidding spitting on the floors.

—The death rate in London last year was 16.3 per 1,000 persons. In New York it was 19.6, and in Boston, 22.5.

—According to the *Medical Record*, tartar emetic is a positive oxytocic. It almost usurps the place of the forceps.

—The income of Guy's Hospital has so far depreciated the past year as to necessitate the closing of some of the wards.

—A very rare case of temporary amblyopia from the use of chocolate, is reported by Dr. Casey A. Wood, in the *Medical Record*.

—Dr. W. H. Pierson treats epilepsy "with marked relief" with drop doses of fluid extract of tansy, on sugar, four times a day.

—To cut short an attack of asthma, spray the back of the patient with chloride of methyl, from above downward, and from below upward.

—A. S. Barling, M. R. C. S. (*Birmingham Med. Jour.*, No. 1832), reports a case of undoubted syphilis cured by the use of anti-syphilitic serum.

—Jonathan Hutchinson, LL.D., F. R. C. S., says in reference to vaccination: "There is, in my opinion, no medical fact that stands on a surer foundation."

—The bill raising the medical course from three to four years is now a law. Those who have already entered college will be allowed to graduate under the old rules.

—If you find that the patient cannot open the mouth you may almost invariably exclude diphtheria, and suspect one of the inflammatory non-diphtheritic forms of angina.

—In true idiopathic chlorosis, where iron is ineffectual, sulphur will produce a marked amelioration. After using sulphur, iron can again be resorted to, and it becomes very beneficial.

—Tape worm is said to be best treated with 10 drop doses in water, three times each day, of a mixture consisting of hydriodate of potash, 36 grains; iodine, 12 grains, and water, 1 ounce.

—Dr. John B. Murphy, of Chicago, the inventor of Murphy's button, is probably making more money at the present time than any other surgeon in the world. He is said to have received \$50,000 within three months for appendicitis alone.

—W. Rushton Parker, M.D., reports (*Brit. Med. Jour.*, No. 1832) a case of cretinism cured by a year's use of thyroid extract, the average dose of which was 5 grains in tablet form, once daily. The child was one year old when the treatment began.

—It has been computed by the *Scientific American* that the death rate of the globe is 68 per minute, 97,790 per day, or 35,717,790 per year. The birth rate is 70 per minute, 100,800 per day, or 36,817,200 per year, reckoning the year to be 365 1/4 days in length.

—Recent experiences in the treatment of diphtheria having shown that coryza in a child is a very fertile field for the propagation of the Klebs-Löffler bacillus, the City Board of Health, of Brooklyn, require all school children having coryza to be examined. Cultures are made from the secretions by the city bacteriologist.

—CICATRICES. According to the *Charlotte Medical Journal*, small, comparatively insignificant cicatrices of the face, such as result from variola, pustula acne, etc., are sometimes made less conspicuous by the long continued ingestion of small doses of some refined oil, as castor or cottonseed oil. It should be given in from three to twelve drop doses three times a day.

—Professor V. Noorden says (*Med. Rec.*) he has discovered a new means of diagnosing diabetes in its very earliest stages, or even a hereditary tendency thereto. He gives the patient 100 grains of grape sugar, which in the normal subject has no effect, but in the incipient diabetic produces glycosuria. If this proves correct it will be most useful in gaining for the diabetic the earliest possible treatment.

—The tracheotomy-tube has found a new use in overcoming the insufficient breathing-capacity for race horses. Since the great horse Ormand was condemned as a roarer, attention has been called to the prevalence of this malady among thoroughbreds, and resort has been had to tracheotomy with admirable results. The statement is made that at the recent Manchester races in England three of the four best steeplechasers carried silver tubes in their windpipes.

—Although there are several factories in the vicinity of New York devoted to the preparation of horse-meat for food, it is comfortable to be reassured by the chemist to the Board of Health that not an ounce of it is sold in this city unless it be in the shape of sausage (*Med. News*). It is also stated by these authorities that the flesh of the horse is easily detected by the usual iodine test for starch, which it contains in contradistinction from all other butchers' meat.

—The essence of turpentine gives, when taken internally, an odor of violets to the urine. This fact, the *Medical Review* says, has been put to good account by a learned professor, who has for some time been in the habit of giving the essence of turpentine in ten-drop doses three times daily to persons afflicted with incontinence of urine. In a short time the disagreeable odor of the secretion is replaced by the characteristic fragrance of the violet, to the great satisfaction of those about the patient. The treatment can be continued without inconvenience for several weeks, and is only counter-indicated in gastric catarrh and nephritis.

—Dr. Scheele, a chemical expert, says that 90 per cent. of the beer brewed in New York would not come up to the test prescribed by the German Government, which is not a severe one, only insisting that pure beer shall be brewed, and fixing severe penalties for the production of any other kind. It is an open secret that American brewers do very much as they please, putting all sorts of illicit stuff in their concoctions. So far they have been able to ward off any troublesome litigation, but it is time that their product was subjected to a strict and uniform official supervision, as it is in Germany, France, Brazil and most other beer-consuming countries. It is a question of the public health and well being, though the brewers in general seem to regard it as one which ought to be considered only from the point of view of their own private interests.

—Heat is the most important factor in altering the character and amount of active principles in a drug preparation. Take, for example, digitalis infusion. M. Roger has shown (*Am. Journ. Pharm.*) that the toxicity of digitalis infusion is very notably diminished when the product of maceration is simply concentrated on a water bath, from 90 to 150 times the amount of the heated product being required to cause death, as compared with the cold water product. What is true of infusion of digitalis when heated is very probably true of other drug preparations. How the commercial tablets alleged to represent galenic preparations are made is known only in a general way; each manufacturer following his own working details. We have been informed, however, on good authority, of a practice pursued by one manufacturer in making of tablets of the so-called narcotic tinctures (*i. e.*, aconite, belladonna, digitalis, etc.), which, if true, is open to the severest censure. This manufacturer, finding that his tablets of these tinctures stuck together on keeping in stock, adopted a new procedure. Instead of making the tablets contain the tincture in minims, as represented, he makes a fluid extract of the drug, evaporates to a thick consistency, washes with petroleum benzine to remove resin, coloring matter and benzine soluble extractive, spreads on plates, dries with heat and makes up into tablets.

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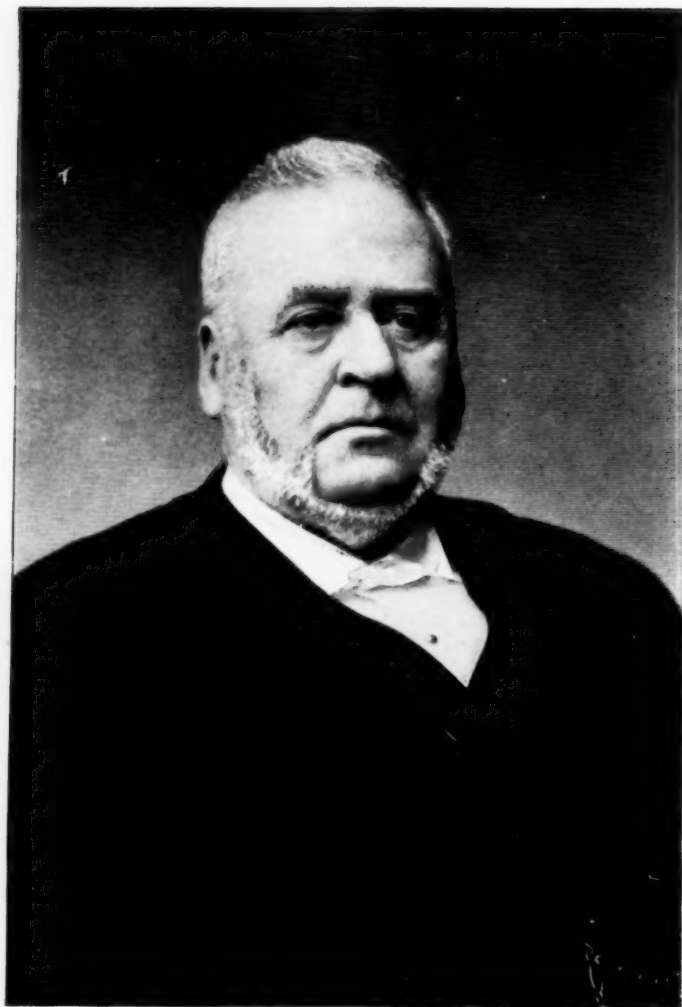
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Ebert Guernsey M.D.